

DTIC



UNITED STATES AIR FORCE

OCCUPATIONAL SURVEY REPORT

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AIRCRAFT LOADMASTER

AFSC 1A2X1

OSSN 2283

MARCH 1998

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OCCUPATIONAL ANALYSIS PROGRAM
AIR FORCE OCCUPATIONAL MEASUREMENT SQUADRON
AIR EDUCATION AND TRAINING COMMAND
1550 5TH STREET EAST
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PREFACE

This report presents the results of an Air Force occupational survey of the Air Force Specialty Code 1A2X1, Aircraft Loadmaster, career ladder. Authority for conducting occupational surveys is contained in Air Force Instruction 36-2623. Copies of this report and its associated computer products are distributed to the Air Force career ladder functional manager, the operational training location, all major using commands, and any other interested operations and training officials.

The survey instrument was developed by Ms. Kimberly G. Williams, Inventory Development Specialist. Captain Daniel J. Watola, Occupational Analyst, analyzed the data and wrote the final report. This report was approved by Lieutenant Colonel Roger W. Barnes, Chief, Airman Analysis Section, Occupational Analysis Flight, Air Force Occupational Measurement Squadron. Ms. Andrea L. Siebold provided computer programming support and Mr. Richard G. Ramos provided administrative support.

Additional copies of this report can be obtained by writing to AFOMS/OMYXI, 1550 5th Street East, Randolph AFB Texas 78150-4449, or by calling DSN 487-5543. For information on the Air Force occupational survey process or other on-going projects, visit our web site at <http://www.omsq.af.mil>.

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SUMMARY OF RESULTS

1. **Survey Coverage:** The Air Force Specialty Code 1A2X1, Aircraft Loadmaster career ladder was surveyed to obtain occupational data for use in evaluating and revising current career ladder documents and training programs. Survey results are based on the responses of 2,141 loadmasters, representing 54 percent of the total assigned population (as of April 1997). Three-, 5-, 7-, and 9-skill level personnel, as well as chief enlisted managers, from all major commands, the Air National Guard, and Air Force Reserve Command are included in this survey.

2. **Career Ladder Structure:** Only one cluster was identified in the career ladder structure analysis. The Aircraft Loadmaster Cluster represents the core job of the career ladder, accounting for 99 percent of the survey sample.

3. **Career Ladder Progression:** The Aircraft Loadmaster career ladder reflects an atypical pattern of career progression in that, regardless of skill level, all loadmasters engage in three core duties. However, while members of the lower skill levels (i.e., 3- and 5-skill levels) tend to engage in technical duties alone, members of the upper skill levels (i.e., 7-, 9-, and CEM skill levels) are characterized by their increasing involvement in supervisory, training, and managerial duties.

4. **Training Analysis:** A match of occupational survey data to the AFSC 1A2X1 Specialty Training Standard (STS) supported all matched STS items. No items are recommended for deletion or proficiency code revision. One unmatched task performed by high percentages of loadmasters is recommended for inclusion in the STS. A similar analysis of the Apprentice Aircraft Loadmaster Course (J3ABR1A231-004) Plan of Instruction (POI) found occupational data generally supported matched POI items. However, four items are recommended for deletion and several unmatched tasks performed by high percentages of loadmasters are recommended for inclusion in the POI.

5. **Job Satisfaction Analysis:** Overall, loadmasters are very content with their jobs. However, job satisfaction is slightly lower among 1997 active duty personnel as compared to those surveyed in the 1991 study. Also, intentions to reenlist are notably lower among first- and second-enlistment loadmasters. While this is also true among career active duty loadmasters, this decrease is largely the result of an increase in planned retirements.

6. **Implications:** The career ladder structure was found to be generally stable when compared to the previous study. The Aircraft Loadmaster career ladder reflects an atypical pattern of career progression in that, regardless of skill level, all loadmasters engage in three core duties. However, while members of the lower skill levels tend to engage in technical duties alone, members of the upper skill levels are characterized by their increasing involvement in supervisory, training, and managerial duties. The training analysis concluded the STS was entirely supported and the POI was generally supported. However, several items were identified for review by training personnel as candidates for revision. Finally, loadmaster job satisfaction was found to be good overall.

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**OCCUPATIONAL SURVEY REPORT (OSR)
AIRCRAFT LOADMASTER CAREER LADDER
(AFSC 1A2X1)**

INTRODUCTION

This report presents the results of an occupational survey of the AFSC 1A2X1, Aircraft Loadmaster career ladder conducted by the Occupational Analysis Flight, Air Force Occupational Measurement Squadron. This survey was conducted as part of a 5-year survey cycle; the previous survey was completed in May 1991.

Background

This OSR can assist training personnel in updating operational training programs and career ladder documents. Furthermore, survey data can be reviewed to assess the need for specialized training for major command (MAJCOM) or skill-level groups.

According to Air Force Manual (AFMAN) 36-2108 *Specialty Description* (dated 31 October 1994), AFSC 1A2X1 personnel accomplish loading and offloading aircraft functions; perform preflight and postflight of aircraft and aircraft systems; compute weight and balance; provide for the safety and comfort of passengers and troops, and security of cargo, mail, and baggage during flight; conduct cargo and personnel airdrops; and supervise loadmaster activities and related functions, including aircraft loading and offloading activities, cargo handling, and restraint. Entry into the career ladder currently requires the candidate score a minimum of 55 in the general category of the Armed Services Vocational Aptitude Battery, be able to lift no less than 70 pounds (strength factor K), and meet the Class III medical standard for aircrew duty. In order to be awarded the 3-skill level, candidates must complete the entry-level course, J3ABR1A231-004 Apprentice Aircraft Loadmaster, taught at Sheppard AFB TX. This 29-day course includes instruction concerning the career field; security; Air Force publications; load planning; palletized load planning; concentrated load planning; the weight, arm, moment formula; center of gravity formula; vehicle center of gravity; load shift formula; Weight and Balance Clearance Form F; adding and removing cargo; aircraft loading systems; pounds per square inch and shoring requirements; restraint; vehicle marshalling and restraint application; customer relations; transportation of hazardous materials; principles of airdrop; and Tanker Airlift Control Element.

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SURVEY METHODOLOGY

Inventory Development

The data collection instrument used for this occupational survey was United States Air Force Job Inventory (JI) Occupational Survey Study Number 2283 (dated April 1997). The JI is a comprehensive list of tasks performed by loadmasters. In developing the JI, a tentative task list was prepared after reviewing pertinent career ladder publications, directives, and the previous study's JI and OSR. This list was then validated by numerous subject-matter experts located at 10 operational and training locations. These locations included:

LOCATION	UNIT VISITED
Charleston AFB SC	437 AW
Cheyenne Municipal Airport WY	153 AW
Francis S. Gabreski Airport NY	102 RQS
Hurlburt Field FL	16 SOW
Little Rock AFB AR	314 AW
McChord AFB WA	4 AS, 7 AS, 62 OG, 313 AS
Sheppard AFB TX	362 TRS
Stratton ANGB NY	139 AS
Travis AFB CA	60 AMW
Youngstown-Warren Regional Airport ARS OH	757 AS

The final JI consists of 559 tasks grouped under 12 duty titles. It also contains a number of background questions relating to workforce demographics, Duty AFSC (DAFSC), time in present job, total active federal military service (TAFMS), job title, work area assigned, flying qualifications, special aircraft qualifications, temporary duties, equipment or resource usage, and job satisfaction.

Survey Administration

From May through November 1997, JIs were administered to all eligible loadmasters. Nearly 3,800 active duty, Air National Guard (ANG), and Air Force Reserve Command (AFRC) personnel with DAFSCs 1A231, 1A251, 1A271, 1A291, and 1A200 received JIs at 98 installations worldwide. Personnel considered ineligible to participate in this survey included, for example, those transitioning to a permanent change of station, those preparing for retirement at the time of the survey, and those who had not been in their present job for at least 6 weeks.

Eligible respondents were first asked to complete an identification and background information section. In the duty-task section, respondents were asked to review the task list and check all tasks performed in their present job. Checked tasks were then rated on a 9-point "relative time spent" scale. A rating of 1 indicated a very small amount of time was spent on the task relative to all other checked tasks, whereas a rating of 9 indicated a very large amount of time was spent on the task relative to all other checked tasks. In calculating a relative time spent index for each checked task, the sum of all ratings was assumed to account for 100 percent of the respondent's time on the job. After each respondent's ratings were summed, each individual task's time spent rating was divided by the sum of all ratings. This quotient was then multiplied by 100 to determine the relative percent time spent on each task. This procedure permits a comparison of percent members performing and relative percent time spent on tasks and groups of tasks.

Survey Sample

All returned JIs were monitored to ensure the final survey sample is representative of the populations of MAJCOM or component and paygrade groups. Table 1 lists the distribution percentage of personnel assigned to an active duty MAJCOM, ANG, or AFRC as of April 1997. Also shown is the percentage distribution of the final survey sample across these groups. The degree of similarity between the two columns of data reflect the degree to which the final sample adequately represents the total population of assigned personnel. In general, the percent of assigned and percent of sample pairs are congruent, indicating the final survey sample is representative of the population of assigned loadmasters. Similarly, Table 2 reveals the final survey sample is representative across paygrades.

Task Factor Administration

Job descriptions alone do not provide sufficient data for making decisions about career ladder documents or training programs; task factor information is needed for a complete analysis of the career ladder. To obtain the needed task factor data, selected senior noncommissioned officer (NCO) loadmasters, generally E-6 or E-7 craftsmen, also completed a second booklet for either Training Emphasis (TE) or Task Difficulty (TD). These booklets were processed separately from the JIs. The resulting data are used in a number of different analyses discussed in greater detail elsewhere in this report.

TABLE 1
DISTRIBUTION OF AFSC 1A2X1 MEMBERS ACROSS MAJOR COMMANDS
AND COMPONENTS

MAJOR COMMAND/COMPONENT	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
ACTIVE DUTY**		
Air Mobility Command	24	25
Air Combat Command	12	13
Air Force Special Operations Command	5	4
Air Education and Training Command	2	4
Pacific Air Forces	2	2
United States Air Forces in Europe	1	1
Air Force Materiel Command	***	***
Other	***	***
AIR FORCE RESERVE COMMAND	34	30
AIR NATIONAL GUARD	18	21
TOTAL ASSIGNED	3,977	
TOTAL SURVEYED	3,784	
TOTAL SAMPLE	2,142	
PERCENT OF ASSIGNED IN SAMPLE	54%	
PERCENT OF SURVEYED IN SAMPLE	57%	

NOTE: Due to rounding, columns may not add to 100 percent.

* As of April 1997

** Active duty personnel represent 48 percent of all assigned personnel and 49 percent of the surveyed sample

*** Less than 1 percent

TABLE 2

DISTRIBUTION OF AFSC 1A2X1 MEMBERS ACROSS PAYGRADES

PAYGRADE	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
E-1 - E-3	6	6
E-4	15	14
E-5	30	30
E-6	23	22
E-7	19	19
E-8	5	6
E-9	2	3

*As of April 1997

Training Emphasis (TE). TE is a rating of the amount of emphasis that should be placed on a task taught in entry-level training. One-hundred and twenty-two active duty, ANG, and AFRC senior NCO loadmasters were asked to select tasks they felt should be taught to entry-level personnel in some sort of structured training. Structured training is defined as training provided at resident technical schools, field training detachments, mobile training teams, formal on-the-job training (OJT), or any other organized training method. They indicated, on a scale of 1, "extremely low emphasis" to 9, "extremely high emphasis," how much training emphasis these tasks should receive. The level of agreement among these 122 NCOs was very high. The average TE rating was 2.20 with a standard deviation of 2.06; thus any task with a TE rating of 4.26 or more indicates a high TE.

Task Difficulty (TD). TD is an estimate of the amount of time needed to learn how to perform a task. The 105 active duty, ANG, and AFRC senior NCO loadmasters who completed TD booklets were asked to rate the difficulty of each task using a 9-point scale, with descriptors ranging from "extremely low difficulty" to "extremely high difficulty." Interrater reliability was very high. Ratings were standardized such that tasks have an average difficulty of 5.00 and a standard deviation of 1.00; thus, any task with a TD rating of 6.00 or more is considered difficult to learn.

CAREER LADDER STRUCTURE

The structure of jobs in the Aircraft Loadmaster career ladder is based on the responses of job incumbents. Each individual in the sample performs a set of tasks called a *Job*. A hierarchical grouping program, which is part of the Comprehensive Occupational Data Analysis Program, creates an individual job description for each respondent using the tasks performed and the average relative time spent on each task. It then compares each individual's job description to every other incumbent's job description, locating the two most similar job descriptions and combining them to form a group job description. In successive iterations, the program adds new members to the initial group or forms new groups if job descriptions become too dissimilar. If there is a substantial degree of similarity between two or more group job descriptions, the program may group these jobs together in a *Cluster*. The jobs and clusters resulting from this hierarchical grouping program define the structure of the career ladder.

Structure Overview

After a careful analysis of the occupational data, one cluster was identified. This cluster, Aircraft Loadmaster (ST19, N=2,117), is graphically depicted in Figure 1 and described in detail in succeeding paragraphs. The stage number (ST) beside the title is a computer-generated code number which can be used to reference related data found in the study archives. The sample

**AFSC 1A2X1 CAREER LADDER SPECIALTY JOBS
(N = 2,117)**

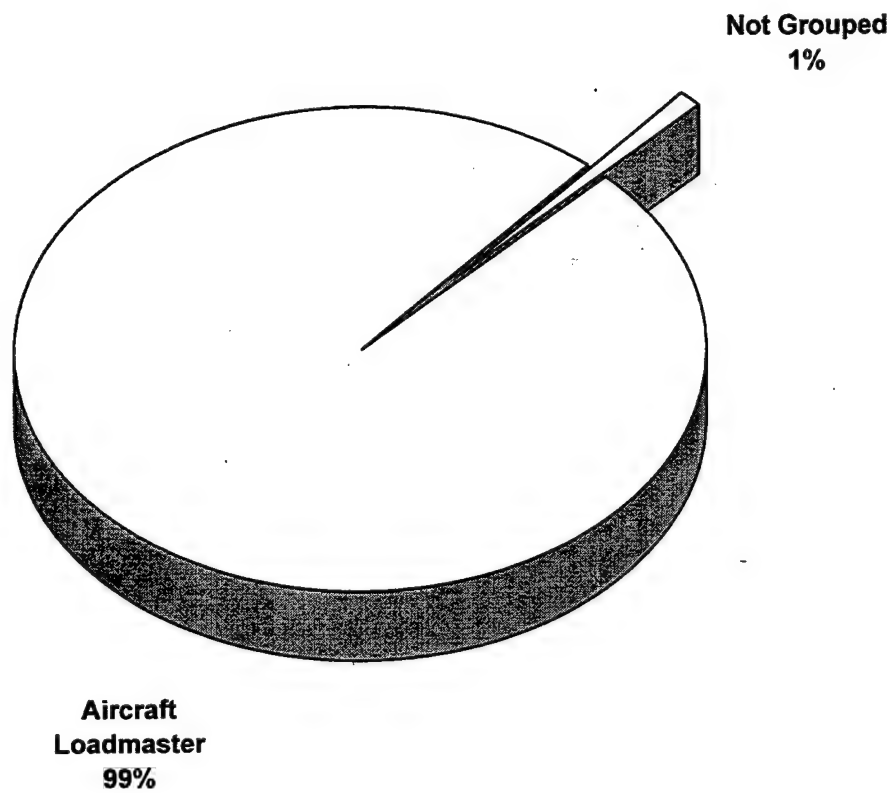


FIGURE 1

number (N) reports the number of members within the group. The following results can be used to identify tasks that are specific to the job, distinguish tasks that are obsolete or not widely performed, and determine training needs for incumbents.

Aircraft loadmasters account for 99 percent of the survey sample; the remaining 1 percent are classified as "not grouped." While 12 of these ungrouped members described their job title as "loadmaster" or "aircraft loadmaster," the remaining 14 provided a variety of job titles including "CDC writer," "classroom instructor," "travel team planner," and "chief of loadmaster assignments." Ungrouped members are not identified with the Aircraft Loadmaster Cluster due to differences in the tasks they perform relative to grouped members.

Three tables in this section provide background information about the Aircraft Loadmaster Cluster. Table 3 displays selected background information including group size, DAFSC, component status, predominant paygrade, average TAFMS, average number of tasks performed, and percentage of members supervising. Table 4 depicts the average relative time spent by loadmasters across each of the career ladder's 12 duties. Finally, Table 5 lists several representative tasks performed by loadmasters.

Job Descriptions

I. AIRCRAFT LOADMASTER (ST19). This job consists of 2,117 members, or 99 percent of the total survey sample, and represents the core job of the Aircraft Loadmaster career ladder. Personnel comprising this job spend the majority of their time loading and unloading aircraft (18 percent), performing aircraft preflight activities (18 percent), and performing common aircrew activities (15 percent). Overall, members perform an average of 195 tasks, with 97 tasks accounting for 50 percent of their time. Tasks performed by Aircraft Loadmasters include:

- open or close crew entrance or paratroop doors
- inspect aircraft forms
- maintain flight manuals, safety or operational supplements, or flight crew checklists
- open or close troop doors
- operate galley equipment, such as ovens, coffee makers, or microwave ovens
- open or close aft cargo doors
- tie down cargo, equipment, or baggage in aircraft
- fire small arms for qualification
- perform stowaway checks
- compute entries on DD Forms 365-4 (Weight and Balance Clearance Form F - Transport)

TABLE 3

TIME SPENT ON DUTIES BY AIRCRAFT LOADMASTERS
(AVERAGE RELATIVE PERCENT TIME SPENT)

DUTY	AIRCRAFT LOADMASTER (ST19)
A PERFORMING COMMON AIRCREW ACTIVITIES	15
B PERFORMING PRELIMINARY LOAD PLANNING	8
C PERFORMING AIRCRAFT PREFLIGHT ACTIVITIES	18
D PERFORMING GROUND SUPPORT EQUIPMENT	5
E PREPARING AIRCRAFT FOR AIRDROP OPERATIONS	8
F LOADING OR UNLOADING AIRCRAFT	18
G PERFORMING IN-FLIGHT ACTIVITIES	7
H PERFORMING OR REVIEWING EMERGENCY PROCEDURES	9
I PERFORMING MANAGEMENT OR SUPERVISORY ACTIVITIES	6
J PERFORMING TRAINING ACTIVITIES	4
K PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER SYSTEM ACTIVITIES	1
L PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1

TABLE 4

SELECTED BACKGROUND DATA FOR AIRCRAFT LOADMASTERS

	AIRCRAFT LOADMASTER (ST19)
GROUP SIZE	2,117
PERCENT OF SAMPLE	99%
PERCENT IN CONUS	92%
<hr/>	
DAFSC DISTRIBUTION (PERCENT):	
1A231	7%
1A251	39%
1A271	44%
1A291	7%
1A200	3%
<hr/>	
COMPONENT STATUS (PERCENT):	
ACTIVE DUTY	49%
AIR FORCE RESERVE COMMAND	30%
AIR NATIONAL GUARD	21%
<hr/>	
PREDOMINANT PAYGRADE(S)	E-5/E-6/E-7
AVERAGE TAFMS IN MONTHS (ACTIVE DUTY ONLY)	140
PERCENT IN FIRST-ENLISTMENT (ACTIVE DUTY ONLY)	16%
<hr/>	
AVERAGE NUMBER OF TASKS PERFORMED	195
PERCENT SUPERVISING	36%

TABLE 5

**REPRESENTATIVE TASKS PERFORMED BY AIRCRAFT LOADMASTERS
(PERCENT MEMBERS PERFORMING)**

TASK	AIRCRAFT LOADMASTER (N=2,117)
A22 Open or close crew entrance or paratroop doors	97
C80 Inspect aircraft forms	97
A20 Maintain flight manuals, safety or operational supplements, or flight crew checklists	97
F270 Open or close troop doors	97
A26 Operate galley equipment, such as ovens, coffee makers, or microwave ovens	97
F268 Open or close aft cargo doors	97
F282 Tie down cargo, equipment, or baggage in aircraft	97
A9 Fire small arms for qualification	96
F277 Perform stowaway checks	96
F234 Compute entries on DD Forms 365-4 (Weight and Balance Clearance Form F - Transport)	96
F271 Perform after-loading checklist procedures	96
F247 Inspect cargo prior to loading	96
C126 Inspect or set lighting in troop or cargo compartments	96
C76 Inspect aft cargo doors or ramps	96
H330 Perform or review emergency aircraft ground egress procedures	95
C118 Inspect or inventory aircraft emergency equipment	95
C82 Inspect aircraft winches or snatch blocks	95
F233 Brief loading crews concerning loading or unloading operations	95
C112 Inspect roller conveyors	95
A48 Review flight crew information files (FCIFs)	95
C90 Inspect crew galleys	95
F240 Compute restraint criteria	94
H328 Perform or review ditching procedures	94
A6 Demonstrate use of life preservers, parachutes, exposure suits, personal protective equipment, or oxygen masks	94
C139 Test public address systems	94
F264 Load or unload passengers, other than engine running	94
A19 Load crew gear or personal equipment on aircraft	94
A12 Inspect or inventory life support equipment	94
F261 Load or unload nonpalletized cargo	93
A23 Operate emergency escape hatches	93
C121 Inspect or inventory tie-down equipment	93
C116 Inspect troop doors	93
F248 Inspect vehicles prior to loading	93

A majority of personnel are 7-skill level (44 percent) or 5-skill level (39 percent), with the remainder distributed among the 3-, 9-, and CEM-skill levels (7, 7, and 3 percent respectively). Nearly one-half of incumbents are active duty personnel (49 percent), 30 percent are AFRC members, and 21 percent are ANG personnel. Aircraft Loadmasters typically hold the ranks of E-5 through E-7, with an average of 140 months TAFMS. Sixteen percent of loadmasters are in their first-enlistment and 36 percent are supervising others.

Comparison of Current Survey to Previous Survey

The results of this career ladder structure analysis were compared to those of the previous analysis published in May 1991. As indicated in Table 6, only the Aircraft Loadmaster Cluster was identified in both the current and previous studies. This does not suggest that the five additional functions identified in the previous study are no longer being performed. Rather, the personnel performing these functions in the current study have been identified with a single job group called Aircraft Loadmaster.

Summary

Overall, comparisons of the 1991 and 1997 job structures indicate that the Aircraft Loadmaster career ladder has remained fairly stable over time. While Aircraft Loadmaster was the only job group identified in the current study, it comprises personnel performing all of the functions identified in the previous study.

ANALYSIS OF DAFSC GROUPS

An analysis of DAFSC groups, in conjunction with an analysis of the career ladder structure, is an integral part of an occupational survey. A DAFSC analysis identifies similarities and differences in task and duty performance at various skill levels. This information may be used to evaluate how well career ladder documents such as AFMAN 36-2108 *Specialty Description*, the Career Field Education and Training Plan, and the Specialty Training Standard (STS) reflect what is being accomplished in the field. This analysis has been divided into active duty, ANG, and AFRC sections.

TABLE 6

COMPARISON OF CURRENT AND PREVIOUS STUDY JOB GROUPS

1998 AFSC 1A2X1 STUDY (N=2,142)	1991 AFSC 114X0 STUDY (N=1,305)
AIRCRAFT LOADMASTER (NOT IDENTIFIED) (NOT IDENTIFIED) (NOT IDENTIFIED) (NOT IDENTIFIED) (NOT IDENTIFIED)	AIRLIFT LOADMASTER AIRLIFT/AIRDROP LOADMASTER SUPERINTENDENT LOADMASTER GROUND SUPPORT PERSONNEL STAFF PERSONNEL MANAGER

Active Duty Skill Level Descriptions

DAFSC 1A231. These 148 active duty 3-skill level personnel represent 7 percent of the survey sample. Table 7 shows that these airmen spend the majority of their time loading and unloading aircraft (20 percent), performing aircraft preflight activities (20 percent), performing common aircrew activities (17 percent), and performing or reviewing emergency procedures (10 percent). As shown in Table 8, members generally perform technical tasks related to these duties.

DAFSC 1A251. These 440 active duty 5-skill level members account for 21 percent of the survey sample. According to Table 7, the members of this group spend a large portion of their time loading and unloading aircraft (18 percent), performing aircraft preflight activities (18 percent), performing common aircrew activities (15 percent), performing or reviewing emergency procedures (10 percent), and preparing aircraft for airdrop operations (10 percent). Table 9 reveals the technical tasks they perform are similar to those performed by their 3-skill level counterparts. However, 5-skill level incumbents do not specialize in technical tasks alone; 8 percent of their time is spent engaged in supervisory and training activities. Table 10 shows a higher percentage of 5-skill level members perform these functions as compared to 3-skill level members, reflecting the beginnings of a shift from primarily technical functions to some supervisory functions with increasing skill level.

DAFSC 1A271. These 373 active duty 7-skill level personnel account for 18 percent of the survey sample. These members spend the majority of their time loading and unloading aircraft (16 percent), performing aircraft preflight activities (15 percent), and performing common aircrew activities (13 percent) (see Table 7). As shown in Table 11, the technical nature of their job is reflected in the tasks they perform. Table 7 also shows 18 percent of their time is spent performing supervisory and training activities. Table 12 highlights 7-skill level members' increasing responsibility, as a higher percentage of members are performing various supervisory and training tasks as compared to their 5-skill level counterparts.

DAFSC 1A291. These 57 active duty 9-skill level members account for just 3 percent of the survey sample. According to Table 7, the members of this group spend 70 percent of their time engaged in a wide range of technical duties (e.g., loading and unloading aircraft, performing aircraft preflight activities, and performing common aircrew activities). Table 13 provides a list of representative tasks performed by 9-skill level members. As expected, these tasks are technical in nature. Nine-skill level members spend the remaining 30 percent of their time performing supervisory and training activities (Table 7). Table 14 reveals a higher percentage of 9-skill level members are performing a number of supervisory tasks, as compared to their 7-skill level counterparts.

TABLE 7

TIME SPENT ON AFSC 1A2X1 JOB DUTIES ACROSS ACTIVE DUTY SKILL LEVEL GROUPS
(AVERAGE RELATIVE PERCENT TIME SPENT)

DUTY	1A231 (N=148)	1A251 (N=440)	1A271 (N=373)	1A291 (N=57)	1A200 (N=32)
A PERFORMING COMMON AIRCREW ACTIVITIES	17	15	13	11	12
B PERFORMING PRELIMINARY LOAD PLANNING	8	7	6	5	6
C PERFORMING AIRCRAFT PREFLIGHT ACTIVITIES	20	18	15	13	13
D PERFORMING GROUND SUPPORT EQUIPMENT	5	5	5	4	4
E PREPARING AIRCRAFT FOR AIRDROP OPERATIONS	8	10	8	7	7
F LOADING OR UNLOADING AIRCRAFT	20	18	16	13	14
G PERFORMING IN-FLIGHT ACTIVITIES	8	7	6	5	5
H PERFORMING OR REVIEWING EMERGENCY PROCEDURES	10	10	8	7	7
I PERFORMING MANAGEMENT OR SUPERVISORY ACTIVITIES	1	4	12	24	20
J PERFORMING TRAINING ACTIVITIES	1	4	6	6	6
K PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER SYSTEM ACTIVITIES	1	1	2	4	4
L PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	1	1	1	1

Note: Due to rounding, columns may not add to 100 percent

TABLE 8

**REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY DAFSC 1A231 MEMBERS
(PERCENT MEMBERS PERFORMING)**

TASK		1A231 (N=148)
A22	Open or close crew entrance or paratroop doors	99
C80	Inspect aircraft forms	98
F282	Tie down cargo, equipment, or baggage in aircraft	97
A26	Operate galley equipment, such as ovens, coffee makers, or microwave ovens	97
A48	Review flight crew information files (FCIFs)	97
F270	Open or close troop doors	97
C90	Inspect crew galleys	97
C82	Inspect aircraft winches or snatch blocks	97
F268	Open or close aft cargo doors	96
C126	Inspect or set lighting in troop or cargo compartments	96
C139	Test public address systems	96
A9	Fire small arms for qualification	96
A20	Maintain flight manuals, safety or operational supplements, or flight crew checklists	95
A6	Demonstrate use of life preservers, parachutes, exposure suits, personal protective equipment, or oxygen masks	95
F247	Inspect cargo prior to loading	95
F277	Perform stowaway checks	95
C116	Inspect troop doors	95
C138	Test interphone stations	95
H317	Brief additional crew members or passengers on in-flight or ground emergency procedures	95
A19	Load crew gear or personal equipment on aircraft	94
F271	Perform after-loading checklist procedures	94
F263	Load or unload palletized cargo, other than engine running	94
F265	Load or unload rolling stock	94
F240	Compute restraint criteria	94
B60	Determine winch cable configurations	94
F234	Compute entries on DD Forms 365-4 (Weight and Balance Clearance Form F - Transport)	93
F233	Brief loading crews concerning loading or unloading operations	93
H330	Perform or review emergency aircraft ground egress procedures	93
F261	Load or unload nonpalletized cargo	93
B69	Perform weight and balance calculations for zero fuel	93
C117	Inspect 463L rail systems	93
B63	Identify safety measures required when loading or unloading aircraft	93
C118	Inspect or inventory aircraft emergency equipment	93
F279	Raise or lower cargo ramps	93

TABLE 9

**REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY DAFSC 1A251 MEMBERS
(PERCENT MEMBERS PERFORMING)**

TASK	1A251 (N=440)
A22 Open or close crew entrance or paratroop doors	97
C80 Inspect aircraft forms	97
F282 Tie down cargo, equipment, or baggage in aircraft	95
A20 Maintain flight manuals, safety or operational supplements, or flight crew checklists	95
F234 Compute entries on DD Forms 365-4 (Weight and Balance Clearance Form F - Transport)	95
F270 Open or close troop doors	95
C112 Inspect roller conveyors	95
A9 Fire small arms for qualification	95
C126 Inspect or set lighting in troop or cargo compartments	95
F277 Perform stowaway checks	95
A48 Review flight crew information files (FCIFs)	94
F268 Open or close aft cargo doors	94
C76 Inspect aft cargo doors or ramps	94
F247 Inspect cargo prior to loading	94
A26 Operate galley equipment, such as ovens, coffee makers, or microwave ovens	94
H330 Perform or review emergency aircraft ground egress procedures	93
C118 Inspect or inventory aircraft emergency equipment	93
F233 Brief loading crews concerning loading or unloading operations	93
F271 Perform after-loading checklist procedures	92
C139 Test public address systems	92
C82 Inspect aircraft winches or snatch blocks	92
F240 Compute restraint criteria	92
C117 Inspect 463L rail systems	92
H328 Perform or review ditching procedures	92
C121 Inspect or inventory tie-down equipment	92
C116 Inspect troop doors	91
C90 Inspect crew galleys	91
A19 Load crew gear or personal equipment on aircraft	91
C138 Test interphone stations	91
A12 Inspect or inventory life support equipment	91
A6 Demonstrate use of life preservers, parachutes, exposure suits, personal protective equipment, or oxygen masks	91
C102 Inspect oxygen systems	90
A23 Operate emergency escape hatches	90
F279 Raise or lower cargo ramps	89
H325 Perform or review cargo jettison procedures	89

TABLE 10

TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY DAFSC 1A231 AND 1A251 MEMBERS
(PERCENT MEMBERS PERFORMING)

TASK	1A231 (N=148)	1A251 (N=440)	DIFFERENCE
B64 Inspect cargo to determine feasibility for air shipment	89	76	13
B72 Verify suitability or compatibility of hazardous cargo being loaded	90	78	11
B60 Determine winch cable configurations	94	83	11
G308 Prepare or serve in-flight meals	73	63	10
F257 Load or unload hazardous materials, other than into or from MASS units	67	57	10
B61 Determine winch cable pulls	93	83	10
D152 Configure aircraft for vehicle missions	82	72	9
I371 Counsel subordinates concerning personal matters	3	25	-22
I430 Perform loadmaster scheduling activities, such as flights or currency requirements	7	29	-22
I368 Conduct supervisory performance feedback sessions	5	26	-21
F232 Align MHE	53	74	-21
A25 Operate flightline motor vehicles	46	65	-19
J470 Counsel trainees on training progress	5	24	-19
I381 Develop or establish work schedules	4	23	-19
J467 Conduct qualification training	5	23	-18
E224 Perform JAIs	15	33	-18
D173 Perform pre-joint airdrop inspections (JAIs)	9	27	-18

TABLE 11

**REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY DAFSC 1A271 MEMBERS
(PERCENT MEMBERS PERFORMING)**

TASK	1A271 (N=373)
C80 Inspect aircraft forms	97
A20 Maintain flight manuals, safety or operational supplements, or flight crew checklists	96
A12 Inspect or inventory life support equipment	96
F268 Open or close aft cargo doors	96
F234 Compute entries on DD Forms 365-4 (Weight and Balance Clearance Form F - Transport)	95
F282 Tie down cargo, equipment, or baggage in aircraft	95
F271 Perform after-loading checklist procedures	95
F270 Open or close troop doors	95
A22 Open or close crew entrance or paratroop doors	95
C76 Inspect aft cargo doors or ramps	95
F277 Perform stowaway checks	95
A48 Review flight crew information files (FCIFs)	95
F247 Inspect cargo prior to loading	95
C118 Inspect or inventory aircraft emergency equipment	94
H330 Perform or review emergency aircraft ground egress procedures	94
F233 Brief loading crews concerning loading or unloading operations	94
C126 Inspect or set lighting in troop or cargo compartments	94
F240 Compute restraint criteria	94
C112 Inspect roller conveyors	94
C102 Inspect oxygen systems	94
A9 Fire small arms for qualification	94
A19 Load crew gear or personal equipment on aircraft	93
A6 Demonstrate use of life preservers, parachutes, exposure suits, personal protective equipment, or oxygen masks	93
F265 Load or unload rolling stock	93
C139 Test public address systems	93
C116 Inspect troop doors	92
C82 Inspect aircraft winches or snatch blocks	92
G292 Operate interphone systems	92
F279 Raise or lower cargo ramps	92
F248 Inspect vehicles prior to loading	92
F261 Load or unload nonpalletized cargo	92
H328 Perform or review ditching procedures	92
F263 Load or unload palletized cargo, other than engine running	91
F264 Load or unload passengers, other than engine running	91
C138 Test interphone stations	91

TABLE 12

TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY DAFSC 1A251 AND 1A271 MEMBERS
(PERCENT MEMBERS PERFORMING)

TASK	1A251 (N=440)	1A271 (N=373)	DIFFERENCE
K509 Compile data for records, reports, logs, or trend analyses	11	30	-20
J488 Identify new training requirements	10	30	-20
I419 Indorse performance reports or supervisory appraisals	4	24	-20
I387 Draft agenda for general meetings, such as staff meetings, briefings, conferences, or workshops	5	23	-19
I384 Direct development or maintenance of status boards, graphs, or charts	7	25	-19
I447 Schedule work assignments or priorities	13	32	-19
J482 Evaluate training requirements for instructors	5	24	-19
K521 Initiate requests for TDY orders	13	32	-19
I443 Review drafts of policy directives, instructions, or manuals	7	26	-19
I358 Assign sponsors for newly assigned personnel	4	23	-19

TABLE 13

**REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY DAFSC 1A291 MEMBERS
(PERCENT MEMBERS PERFORMING)**

TASK	1A291 (N=57)
F268 Open or close aft cargo doors	96
F234 Compute entries on DD Forms 365-4 (Weight and Balance Clearance Form F - Transport)	96
F270 Open or close troop doors	96
C102 Inspect oxygen systems	96
C112 Inspect roller conveyors	96
F282 Tie down cargo, equipment, or baggage in aircraft	95
C76 Inspect aft cargo doors or ramps	95
F271 Perform after-loading checklist procedures	95
F277 Perform stowaway checks	95
F247 Inspect cargo prior to loading	95
C126 Inspect or set lighting in troop or cargo compartments	95
A12 Inspect or inventory life support equipment	95
G292 Operate interphone systems	93
C118 Inspect or inventory aircraft emergency equipment	93
C80 Inspect aircraft forms	93
A48 Review flight crew information files (FCIFs)	93
A22 Open or close crew entrance or paratroop doors	93
C116 Inspect troop doors	93
A9 Fire small arms for qualification	93
A20 Maintain flight manuals, safety or operational supplements, or flight crew checklists	91
C121 Inspect or inventory tie-down equipment	91
B50 Calculate allowable cabin loads (ACLs) for mission requirements	91
F233 Brief loading crews concerning loading or unloading operations	91
H330 Perform or review emergency aircraft ground egress procedures	91
C90 Inspect crew galleys	91
F232 Align MHE	91
F265 Load or unload rolling stock	89
C117 Inspect 463L rail systems	89
C123 Inspect or operate hydraulic systems	89
C91 Inspect emergency escape hatches	89
C81 Inspect aircraft lavatories	89
C139 Test public address systems	89
H328 Perform or review ditching procedures	89
I429 Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	88
B69 Perform weight and balance calculations for zero fuel	88

TABLE 14

TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY DAFSC 1A271 AND 1A291 MEMBERS
(PERCENT MEMBERS PERFORMING)

TASK	1A271 (N=373)	1A291 (N=57)	DIFFERENCE
A16 Inspect or operate external power equipment	63	42	21
A36 Perform cargo courier duties	57	37	20
I359 Compile information for reports or staff studies	37	75	-39
I403 Evaluate job or position descriptions	26	65	-39
I404 Evaluate job-related suggestions	25	61	-36
I417 Implement policies, directives, or procedures for loadmasters	37	72	-35
I382 Direct administrative functions	31	65	-34
I444 Review personnel requirements	24	56	-33
I387 Draft agenda for general meetings, such as staff meetings, briefings, conferences, or workshops	23	56	-33
I456 Write staff studies, surveys, or routine reports, other than training or inspection reports	11	42	-31
I377 Develop organizational or functional charts	23	53	-30
I426 Interpret policies, directives, or procedures for subordinates	49	79	-30

DAFSC 1A200. These 32 active duty CEMs account for just 2 percent of the survey sample. These members spend 74 percent of their time performing technical duties (e.g., loading and unloading aircraft, performing aircraft preflight activities, and performing common aircrew activities) and 26 percent of their time performing managerial, supervisory, and training activities (see Table 7). Table 15 provides a list of representative tasks performed by CEMs. The tasks listed are primarily technical as nearly 75 percent of their time is spent on technical duties. However, Table 16 shows that CEMs engage in a higher percentage of managerial tasks as compared to 9-skill level members, while 9-skill level members perform a higher percentage of supervisory tasks as compared to CEM personnel.

Air National Guard Skill Level Descriptions

DAFSC 1A251. These 118 ANG 5-skill level airmen represent 6 percent of the survey sample. According to Table 17, these members spend the majority of their time loading and unloading aircraft (19 percent), performing aircraft preflight activities (18 percent), performing common aircrew activities (18 percent), and preparing aircraft for airdrop operations (11 percent). Table 18 provides a list of the primarily technical tasks performed by 5-skill level guardsmen.

DAFSC 1A271. These 246 ANG 7-skill level personnel comprise 12 percent of the survey sample. Table 17 shows the members of this group spend 52 percent of their time loading and unloading aircraft (18 percent), performing aircraft preflight activities (17 percent), performing common aircrew activities (17 percent), and preparing aircraft for airdrop operations (10 percent). As demonstrated by the list of representative tasks found in Table 19, the technical activities of this group are not unlike those experienced by 5-skill level guardsmen. However, Table 17 also shows 7-skill level guardsmen spend 6 percent of their time engaged in supervisory and training duties. Table 20 further shows that a higher percentage of 7-skill level guardsmen are performing supervisory and training tasks than their 5-skill level counterparts.

DAFSC 1A291. These 56 ANG 9-skill level members account for just 3 percent of the survey sample. These airmen spend 81 percent of their time performing a variety of technical duties (primarily loading and unloading aircraft, performing aircraft preflight activities, and performing common aircrew activities) and 21 percent of their time engaged in supervisory and training duties (see Table 17). Thus, while the technical tasks performed by 9-skill level guardsmen do not notably differ from those of the 7-skill level guardsmen (contrast Tables 19 and 21), Table 22 reveals that a higher percentage of 9-skill level guardsmen perform supervisory and training tasks as compared to their 7-skill level counterparts.

DAFSC 1A200. These 20 ANG chief enlisted managers (CEMs) account for just 1 percent of the survey sample. These members spend 75 percent of their time performing technical duties (e.g., loading and unloading aircraft, performing aircraft preflight activities, and performing common aircrew activities) and 25 percent of their time performing managerial, supervisory, or

TABLE 15

**REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY DAFSC 1A200 MEMBERS
(PERCENT MEMBERS PERFORMING)**

TASK		1A200 (N=32)
F247	Inspect cargo prior to loading	100
G294	Operate oxygen systems	100
A26	Operate galley equipment, such as ovens, coffee makers, or microwave ovens	100
A6	Demonstrate use of life preservers, parachutes, exposure suits, personal protective equipment, or oxygen masks	100
I429	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	97
F282	Tie down cargo, equipment, or baggage in aircraft	97
F234	Compute entries on DD Forms 365-4 (Weight and Balance Clearance Form F - Transport)	97
A20	Maintain flight manuals, safety or operational supplements, or flight crew checklists	97
F233	Brief loading crews concerning loading or unloading operations	97
B50	Calculate allowable cabin loads (ACLs) for mission requirements	97
G292	Operate interphone systems	97
F271	Perform after-loading checklist procedures	97
C126	Inspect or set lighting in troop or cargo compartments	97
F232	Align MHE	97
B54	Coordinate aircraft loading or unloading with terminal or ramp personnel	97
A22	Open or close crew entrance or paratroop doors	97
F277	Perform stowaway checks	97
F240	Compute restraint criteria	97
C82	Inspect aircraft winches or snatch blocks	97
C80	Inspect aircraft forms	97
H330	Perform or review emergency aircraft ground egress procedures	97
C112	Inspect roller conveyors	97
H328	Perform or review ditching procedures	97
B52	Calculate vehicle clearances	97
H325	Perform or review cargo jettison procedures	97
C139	Test public address systems	97
F242	Compute shoring requirements	97
A23	Operate emergency escape hatches	97
B63	Identify safety measures required when loading or unloading aircraft	94
B69	Perform weight and balance calculations for zero fuel	94
F268	Open or close aft cargo doors	94
A48	Review flight crew information files (FCIFs)	94
F270	Open or close troop doors	94
C76	Inspect aft cargo doors or ramps	94

TABLE 16

TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY DAFSC 1A291 AND 1A200 MEMBERS
(PERCENT MEMBERS PERFORMING)

TASK	1A291 (N=57)	1A200 (N=32)	DIFFERENCE
I416 Evaluate work schedules	56	13	44
I367 Conduct supervisory orientations for newly assigned personnel	60	19	41
I358 Assign sponsors for newly assigned personnel	53	13	40
I396 Establish performance standards for subordinates	67	31	35
I419 Indorse performance reports or supervisory appraisals	47	13	35
I453 Write performance reports or supervisory appraisals	51	19	32
I420 Initiate actions required due to substandard performance of personnel	61	31	30
J470 Counsel trainees on training progress	51	22	29
I445 Schedule personnel for temporary duty (TDY) assignments, leaves, or passes	47	19	29
I377 Develop organizational or functional charts	53	25	28
I366 Conduct staff assistance visits, inspections, or audits	35	75	-40
I427 Investigate accidents or incidents	25	63	-38
J505 Write test questions	21	59	-38
A16 Inspect or operate external power equipment	42	75	-33
I389 Draft changes to TOs, product quality deficiency reports (PQDRs), or regulations	40	72	-32
A1 Apply external power to aircraft	53	84	-32
J503 Validate test questions	18	50	-32
J495 Plan aircrew testing	19	50	-31
I373 Determine or establish publications requirements	37	66	-29
B68 Perform validations on new cargo	33	63	-29

TABLE 17

TIME SPENT ON AFSC 1A2X1 JOB DUTIES ACROSS AIR NATIONAL GUARD SKILL LEVEL GROUPS
(AVERAGE RELATIVE PERCENT TIME SPENT)

DUTY	1A251 (N=118)	1A271 (N=246)	1A291 (N=56)	1A200 (N=20)
A PERFORMING COMMON AIRCREW ACTIVITIES	18	17	14	13
B PERFORMING PRELIMINARY LOAD PLANNING	8	8	6	6
C PERFORMING AIRCRAFT PREFLIGHT ACTIVITIES	18	17	13	12
D PERFORMING GROUND SUPPORT EQUIPMENT	6	7	6	5
E PREPARING AIRCRAFT FOR AIRDROP OPERATIONS	11	10	9	9
F LOADING OR UNLOADING AIRCRAFT	19	18	15	13
G PERFORMING IN-FLIGHT ACTIVITIES	8	7	6	6
H PERFORMING OR REVIEWING EMERGENCY PROCEDURES	9	9	8	7
I PERFORMING MANAGEMENT OR SUPERVISORY ACTIVITIES	1	3	13	18
J PERFORMING TRAINING ACTIVITIES	1	3	6	7
K PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER SYSTEM ACTIVITIES	1	1	3	2
L PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	1	1	1

Note: Due to rounding, columns may not add to 100 percent

TABLE 18

REPRESENTATIVE TASKS PERFORMED BY
AIR NATIONAL GUARD DAFSC 1A251 MEMBERS
(PERCENT MEMBERS PERFORMING)

TASK	1A251 (N=118)
A22 Open or close crew entrance or paratroop doors	97
F268 Open or close aft cargo doors	96
A26 Operate galley equipment, such as ovens, coffee makers, or microwave ovens	96
C80 Inspect aircraft forms	96
F248 Inspect vehicles prior to loading	96
F270 Open or close troop doors	95
F282 Tie down cargo, equipment, or baggage in aircraft	94
F234 Compute entries on DD Forms 365-4 (Weight and Balance Clearance Form F - Transport)	94
A20 Maintain flight manuals, safety or operational supplements, or flight crew checklists	94
C76 Inspect aft cargo doors or ramps	94
C126 Inspect or set lighting in troop or cargo compartments	94
C139 Test public address systems	94
B63 Identify safety measures required when loading or unloading aircraft	93
F279 Raise or lower cargo ramps	92
C118 Inspect or inventory aircraft emergency equipment	92
F271 Perform after-loading checklist procedures	92
B69 Perform weight and balance calculations for zero fuel	92
B54 Coordinate aircraft loading or unloading with terminal or ramp personnel	92
F264 Load or unload passengers, other than engine running	92
C90 Inspect crew galleys	92
C82 Inspect aircraft winches or snatch blocks	92
F240 Compute restraint criteria	92
H328 Perform or review ditching procedures	92
C117 Inspect 463L rail systems	92
F277 Perform stowaway checks	92
F233 Brief loading crews concerning loading or unloading operations	92
A18 Install or remove aircraft wheel chocks	92
F278 Perform winch cargo on- or offload procedures	92
F247 Inspect cargo prior to loading	91
F261 Load or unload nonpalletized cargo	91
B58 Determine maximum passenger seat releases	91
A9 Fire small arms for qualification	91
C121 Inspect or inventory tie-down equipment	90
F263 Load or unload palletized cargo, other than engine running	90
C112 Inspect roller conveyors	90
F265 Load or unload rolling stock	90

TABLE 19

REPRESENTATIVE TASKS PERFORMED BY
AIR NATIONAL GUARD DAFSC 1A271 MEMBERS
(PERCENT MEMBERS PERFORMING)

TASK	1A271 (N=246)
A26 Operate galley equipment, such as ovens, coffee makers, or microwave ovens	99
A22 Open or close crew entrance or paratroop doors	98
A20 Maintain flight manuals, safety or operational supplements, or flight crew checklists	98
C76 Inspect aft cargo doors or ramps	98
F271 Perform after-loading checklist procedures	98
F282 Tie down cargo, equipment, or baggage in aircraft	97
F270 Open or close troop doors	97
F264 Load or unload passengers, other than engine running	97
A9 Fire small arms for qualification	97
F268 Open or close aft cargo doors	96
C80 Inspect aircraft forms	96
A18 Install or remove aircraft wheel chocks	96
A6 Demonstrate use of life preservers, parachutes, exposure suits, personal protective equipment, or oxygen masks	96
F234 Compute entries on DD Forms 365-4 (Weight and Balance Clearance Form F - Transport)	95
H330 Perform or review emergency aircraft ground egress procedures	95
A27 Order aircrew flight lunches	95
A19 Load crew gear or personal equipment on aircraft	95
F247 Inspect cargo prior to loading	95
F261 Load or unload nonpalletized cargo	95
C90 Inspect crew galleys	95
C82 Inspect aircraft winches or snatch blocks	95
F233 Brief loading crews concerning loading or unloading operations	94
B54 Coordinate aircraft loading or unloading with terminal or ramp personnel	94
F240 Compute restraint criteria	94
H328 Perform or review ditching procedures	94
C117 Inspect 463L rail systems	94
F265 Load or unload rolling stock	94
F274 Perform engine-running loading or unloading of passengers	94
A23 Operate emergency escape hatches	94
F279 Raise or lower cargo ramps	94
F263 Load or unload palletized cargo, other than engine running	94
F277 Perform stowaway checks	94
F280 Review cargo documentation	94
C121 Inspect or inventory tie-down equipment	94
C118 Inspect or inventory aircraft emergency equipment	93

TABLE 20

TASKS WHICH BEST DIFFERENTIATE BETWEEN AIR NATIONAL GUARD DAFSC 1A251 AND 1A271 MEMBERS
(PERCENT MEMBERS PERFORMING)

TASK	1A251 (N=118)	1A271 (N=246)	DIFFERENCE
F269 Open or close forward cargo doors	42	29	13
I363 Conduct loadmaster or aircrew meetings	16	44	-27
I424 Inspect aircraft loadmaster activities	3	29	-26
I449 Supervise military personnel	5	30	-25
E224 Perform JAIs	14	36	-22
D173 Perform pre-joint airdrop inspections (JAIs)	18	37	-20
A43 Perform wing walking or marshalling duties	55	75	-20
J464 Conduct OJT	13	33	-20
A4 Coordinate correction of aircraft discrepancies or malfunctions, other than MASS, with aircraft commander	31	50	-20
F235 Compute load distributions using balance computers or load adjusters	26	47	-20
I430 Perform loadmaster scheduling activities, such as flights or currency requirements	9	28	-19

TABLE 21

REPRESENTATIVE TASKS PERFORMED BY
AIR NATIONAL GUARD DAFSC 1A291 MEMBERS
(PERCENT MEMBERS PERFORMING)

TASK	1A291 (N=56)
F270 Open or close troop doors	98
F264 Load or unload passengers, other than engine running	98
F247 Inspect cargo prior to loading	98
F265 Load or unload rolling stock	98
F274 Perform engine-running loading or unloading of passengers	98
A6 Demonstrate use of life preservers, parachutes, exposure suits, personal protective equipment, or oxygen masks	98
G283 Brief passengers or troops on foreign or domestic border clearance requirements	98
A9 Fire small arms for qualification	98
A20 Maintain flight manuals, safety or operational supplements, or flight crew checklists	96
F234 Compute entries on DD Forms 365-4 (Weight and Balance Clearance Form F - Transport)	96
H330 Perform or review emergency aircraft ground egress procedures	96
F233 Brief loading crews concerning loading or unloading operations	96
F277 Perform stowaway checks	96
A26 Operate galley equipment, such as ovens, coffee makers, or microwave ovens	96
F248 Inspect vehicles prior to loading	96
H317 Brief additional crew members or passengers on in-flight or ground emergency procedures	96
F240 Compute restraint criteria	96
H328 Perform or review ditching procedures	96
D142 Configure aircraft for cargo missions	96
H320 Perform or review antihijacking procedures	96
F253 Install or remove shorings	96
F268 Open or close aft cargo doors	95
G292 Operate interphone systems	95
B54 Coordinate aircraft loading or unloading with terminal or ramp personnel	95
F280 Review cargo documentation	95
C138 Test interphone stations	95
B58 Determine maximum passenger seat releases	95
F261 Load or unload nonpalletized cargo	95
G284 Brief passengers or troops using aircraft checklists, other than for emergency equipment operation	95
A19 Load crew gear or personal equipment on aircraft	95
H352 Perform or review smoke or fumes elimination procedures	95
F278 Perform winch cargo on- or offload procedures	95
A25 Operate flightline motor vehicles	95

TABLE 22

TASKS WHICH BEST DIFFERENTIATE BETWEEN AIR NATIONAL GUARD DAFSC 1A271 AND 1A291 MEMBERS
(PERCENT MEMBERS PERFORMING)

TASK	1A271 (N=246)	1A291 (N=56)	DIFFERENCE
J470 Counsel trainees on training progress	19	70	-51
I409 Evaluate personnel for compliance with performance standards	13	63	-50
I410 Evaluate personnel for instructor or flight examiner duties	11	61	-50
I411 Evaluate personnel for promotion, demotion, reclassification, or special awards	8	55	-47
I424 Inspect aircraft loadmaster activities	29	75	-46
J468 Conduct upgrade training for instructors or flight examiners	12	55	-44
I371 Counsel subordinates concerning personal matters	17	61	-44
I382 Direct administrative functions	8	52	-44
I429 Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	29	73	-44
I430 Perform loadmaster scheduling activities, such as flights or currency requirements	28	71	-43

training activities (Table 17). Table 23 provides a list of representative tasks performed by CEM personnel; these tasks are primarily technical in nature. However, Table 24 shows CEMs engage in a higher percentage of supervisory and managerial tasks as compared to 9-skill level guardsmen.

Air Force Reserve Command Skill Level Descriptions

DAFSC 1A231. These 5 AFRC 3-skill level personnel represent less than 1 percent of the survey sample. Table 25 shows these airmen spend the majority of their time performing aircraft preflight activities (19 percent), loading and unloading aircraft (17 percent), performing common aircrew activities (11 percent), performing or reviewing emergency procedures (11 percent), and preparing aircraft for airdrop operations (11 percent). As shown in Table 26, members generally perform technical tasks related to these duties.

DAFSC 1A251. These 280 AFRC 5-skill level members account for 13 percent of the survey sample. According to Table 25, the members of this group spend a large portion of their time performing aircraft preflight activities (23 percent), loading and unloading aircraft (22 percent), and performing common aircrew activities (18 percent). As shown in Table 27, the tasks performed by 5-skill level reservists are less diverse than those performed by their 3-skill level counterparts. For example, Table 28 shows a higher percentage of 3-skill level reservists engage in tasks related to preparing aircraft for airdrop operations, while a higher percentage of 5-skill level reservists perform tasks related to more general duties (i.e., performing common aircrew activities or performing in-flight activities).

DAFSC 1A271. These 317 AFRC 7-skill level personnel account for 15 percent of the survey sample. These members spend the majority of their time loading and unloading aircraft (19 percent), performing aircraft preflight activities (19 percent), and performing common aircrew activities (16 percent) (see Table 25). As shown in Table 29, the technical nature of their job is reflected in the tasks they perform. However, Table 25 also shows 10 percent of their time is spent performing supervisory and training activities. Table 30 highlights 7-skill level members' increasing responsibility, as a higher percentage of members are performing various supervisory and training tasks as compared to their 5-skill level counterparts.

DAFSC 1A291. These 37 AFRC 9-skill level members account for just 2 percent of the survey sample. According to Table 25, the members of this group spend 77 percent of their time engaged in a number of technical duties (e.g., loading and unloading aircraft, performing aircraft preflight activities, and performing common aircrew activities). Table 31 provides a list of representative tasks performed by 9-skill level members. As expected, these tasks are technical in nature. Nine-skill level members spend the remaining 23 percent of their time performing supervisory and training activities (Table 25). Table 32 reveals a higher percentage of 9-skill level members perform a number of supervisory tasks as compared to their 7-skill level counterparts.

TABLE 23

REPRESENTATIVE TASKS PERFORMED BY
AIR NATIONAL GUARD DAFSC 1A200 MEMBERS
(PERCENT MEMBERS PERFORMING)

TASK	1A200 (N=20)
A20 Maintain flight manuals, safety or operational supplements, or flight crew checklists	100
A22 Open or close crew entrance or paratroop doors	100
B50 Calculate allowable cabin loads (ACLs) for mission requirements	100
C118 Inspect or inventory aircraft emergency equipment	100
C80 Inspect aircraft forms	100
I363 Conduct loadmaster or aircrew meetings	100
C90 Inspect crew galleys	100
A12 Inspect or inventory life support equipment	100
C126 Inspect or set lighting in troop or cargo compartments	100
C82 Inspect aircraft winches or snatch blocks	100
F240 Compute restraint criteria	100
D142 Configure aircraft for cargo missions	100
B64 Inspect cargo to determine feasibility for air shipment	100
A26 Operate galley equipment, such as ovens, coffee makers, or microwave ovens	100
C139 Test public address systems	100
D147 Configure aircraft for passenger missions	100
B52 Calculate vehicle clearances	100
C119 Inspect or inventory fleet service equipment	100
A25 Operate flightline motor vehicles	100
B51 Calculate outsized or oversized cargo clearances	100
A42 Perform postflight aircraft security measures, such as sealing or locking	100
A18 Install or remove aircraft wheel chocks	100
B60 Determine winch cable configurations	100
B72 Verify suitability or compatibility of hazardous cargo being loaded	100
H330 Perform or review emergency aircraft ground egress procedures	100
H328 Perform or review ditching procedures	100
H331 Perform or review emergency ramp or door procedures	100
H352 Perform or review smoke or fumes elimination procedures	100
B71 Select material handling equipment (MHE) for loading or unloading cargo or passengers	100
F241 Compute roller-load limitations	100
A23 Operate emergency escape hatches	100
H340 Perform or review landing-with-gear-retracted procedures	100
F242 Compute shoring requirements	100
F282 Tie down cargo, equipment, or baggage in aircraft	95
F234 Compute entries on DD Forms 365-4 (Weight and Balance Clearance Form F - Transport)	95

TABLE 24

TASKS WHICH BEST DIFFERENTIATE BETWEEN AIR NATIONAL GUARD DAFSC 1A291 AND 1A200 MEMBERS
(PERCENT MEMBERS PERFORMING)

TASK	1A291 (N=56)	1A200 (N=20)	DIFFERENCE
C78 Inspect aircraft exteriors, other than MASS components	54	30	24
E224 Perform JAIs	54	30	24
A17 Install or remove aircraft gear pins	43	20	23
I358 Assign sponsors for newly assigned personnel	30	75	-45
I362 Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	36	80	-44
I396 Establish performance standards for subordinates	38	80	-43
I377 Develop organizational or functional charts	32	75	-43
I423 Initiate personnel action requests	25	65	-40
I367 Conduct supervisory orientations for newly assigned personnel	46	85	-39
I415 Evaluate workload requirements	38	75	-38
I416 Evaluate work schedules	38	75	-38
I381 Develop or establish work schedules	52	90	-38
I420 Initiate actions required due to substandard performance of personnel	50	85	-35

TABLE 25

TIME SPENT ON AFSC 1A2X1 JOB DUTIES ACROSS AIR FORCE RESERVE COMMAND SKILL LEVEL GROUPS
(AVERAGE RELATIVE PERCENT TIME SPENT)

DUTY	1A231 (N=5)	1A251 (N=280)	1A271 (N=317)	1A291 (N=37)	1A200 (N=12)
A PERFORMING COMMON AIRCREW ACTIVITIES	16	18	16	14	13
B PERFORMING PRELIMINARY LOAD PLANNING	10	9	8	7	6
C PERFORMING AIRCRAFT PREFLIGHT ACTIVITIES	19	23	19	14	15
D PERFORMING GROUND SUPPORT EQUIPMENT	7	5	5	5	4
E PREPARING AIRCRAFT FOR AIRDROP OPERATIONS	11	3	4	5	2
F LOADING OR UNLOADING AIRCRAFT	17	22	19	16	15
G PERFORMING IN-FLIGHT ACTIVITIES	7	7	7	6	5
H PERFORMING OR REVIEWING EMERGENCY PROCEDURES	11	9	8	7	6
I PERFORMING MANAGEMENT OR SUPERVISORY ACTIVITIES	*	1	6	15	21
J PERFORMING TRAINING ACTIVITIES	1	1	4	8	9
K PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER SYSTEM ACTIVITIES	1	*	1	2	3
L PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	1	1	1	1

* Less than 1 percent

Note: Due to rounding, columns may not add to 100 percent

TABLE 26

REPRESENTATIVE TASKS PERFORMED BY
AIR FORCE RESERVE COMMAND DAFSC 1A231 MEMBERS
(PERCENT MEMBERS PERFORMING)

TASK	1A231 (N=5)
B69 Perform weight and balance calculations for zero fuel	100
C74 Inspect and arm emergency exit lights	100
A48 Review flight crew information files (FCIFs)	100
B54 Coordinate aircraft loading or unloading with terminal or ramp personnel	100
C112 Inspect roller conveyors	100
F268 Open or close aft cargo doors	100
A11 Inspect aircraft locks or fasteners	100
C121 Inspect or inventory tie-down equipment	100
B63 Identify safety measures required when loading or unloading aircraft	100
F270 Open or close troop doors	100
C123 Inspect or operate hydraulic systems	100
C126 Inspect or set lighting in troop or cargo compartments	100
F234 Compute entries on DD Forms 365-4 (Weight and Balance Clearance Form F - Transport)	100
F279 Raise or lower cargo ramps	100
C97 Inspect ground or truck loading ramps	100
A22 Open or close crew entrance or paratroop doors	100
B64 Inspect cargo to determine feasibility for air shipment	100
C118 Inspect or inventory aircraft emergency equipment	100
A14 Inspect or inventory personal equipment, other than personal protective equipment	100
D142 Configure aircraft for cargo missions	100
F280 Review cargo documentation	100
H325 Perform or review cargo jettison procedures	100
F282 Tie down cargo, equipment, or baggage in aircraft	100
C82 Inspect aircraft winches or snatch blocks	100
A19 Load crew gear or personal equipment on aircraft	100
H330 Perform or review emergency aircraft ground egress procedures	100
F271 Perform after-loading checklist procedures	100
F261 Load or unload nonpalletized cargo	100
D147 Configure aircraft for passenger missions	100
F233 Brief loading crews concerning loading or unloading operations	100
C139 Test public address systems	100
F277 Perform stowaway checks	100
G303 Perform periodic cargo inspections	100
C90 Inspect crew galleys	100
H352 Perform or review smoke or fumes elimination procedures	100

TABLE 27

REPRESENTATIVE TASKS PERFORMED BY
AIR FORCE RESERVE COMMAND DAFSC 1A251 MEMBERS
(PERCENT MEMBERS PERFORMING)

TASK	1A251 (N=280)
A26 Operate galley equipment, such as ovens, coffee makers, or microwave ovens	98
C90 Inspect crew galleys	98
C82 Inspect aircraft winches or snatch blocks	98
F268 Open or close aft cargo doors	97
A20 Maintain flight manuals, safety or operational supplements, or flight crew checklists	96
F247 Inspect cargo prior to loading	96
A9 Fire small arms for qualification	96
A19 Load crew gear or personal equipment on aircraft	96
F277 Perform stowaway checks	96
B69 Perform weight and balance calculations for zero fuel	95
F264 Load or unload passengers, other than engine running	95
F270 Open or close troop doors	95
C126 Inspect or set lighting in troop or cargo compartments	95
F241 Compute roller-load limitations	95
F271 Perform after-loading checklist procedures	95
F248 Inspect vehicles prior to loading	95
F261 Load or unload nonpalletized cargo	95
A22 Open or close crew entrance or paratroop doors	95
F234 Compute entries on DD Forms 365-4 (Weight and Balance Clearance Form F - Transport)	94
A6 Demonstrate use of life preservers, parachutes, exposure suits, personal protective equipment, or oxygen masks	94
F282 Tie down cargo, equipment, or baggage in aircraft	94
C121 Inspect or inventory tie-down equipment	94
C112 Inspect roller conveyors	94
C118 Inspect or inventory aircraft emergency equipment	94
B63 Identify safety measures required when loading or unloading aircraft	94
C76 Inspect aft cargo doors or ramps	94
F240 Compute restraint criteria	94
C80 Inspect aircraft forms	94
A23 Operate emergency escape hatches	94
C116 Inspect troop doors	94
C81 Inspect aircraft lavatories	94
H330 Perform or review emergency aircraft ground egress procedures	94
A48 Review flight crew information files (FCIFs)	93
A12 Inspect or inventory life support equipment	93

TABLE 28

TASKS WHICH BEST DIFFERENTIATE BETWEEN AIR FORCE RESERVE COMMAND DAFSC 1A231 AND 1A251 MEMBERS
(PERCENT MEMBERS PERFORMING)

TASK	1A231 (N=5)	1A251 (N=280)	DIFFERENCE
E209 Install or remove buffer stop assemblies (BSAs)	80	16	64
E210 Install or remove centerline vertical restraints (CVRs)	80	17	63
E196 Inspect pendulum release systems	80	19	61
H336 Perform or review heavy equipment airdrop malfunction procedures	80	20	60
E201 Inspect static-line retriever systems	80	20	60
G305 Perform predrop inspections	80	20	60
E212 Install or remove CDS alternate forward barriers	80	20	60
H326 Perform or review CDS airdrop malfunction procedures	80	20	60
E184 Inspect airdrop platforms before or after loading	80	20	60
E231 Rtg static-line retriever cables	80	21	59
G307 Prepare load messages	*	76	-76
A1 Apply external power to aircraft	20	86	-66
C133 Position flight-deck ladders for entry or exit	*	59	-59
G311 Review or complete customs or border clearance forms	20	78	-58
C106 Inspect personnel warning advisor signs	20	77	-57
G308 Prepare or serve in-flight meals	20	77	-57
A18 Install or remove aircraft wheel chocks	20	77	-57
F248 Inspect vehicles prior to loading	40	95	-55
A16 Inspect or operate external power equipment	20	74	-54
A36 Perform cargo courier duties	*	54	-54

* Less than 1 percent

TABLE 29

REPRESENTATIVE TASKS PERFORMED BY
AIR FORCE RESERVE COMMAND DAFSC 1A271 MEMBERS
(PERCENT MEMBERS PERFORMING)

TASK	1A271 (N=317)
A26 Operate galley equipment, such as ovens, coffee makers, or microwave ovens	100
A20 Maintain flight manuals, safety or operational supplements, or flight crew checklists	99
H330 Perform or review emergency aircraft ground egress procedures	98
C76 Inspect aft cargo doors or ramps	98
C126 Inspect or set lighting in troop or cargo compartments	98
A12 Inspect or inventory life support equipment	98
F270 Open or close troop doors	97
C90 Inspect crew galleys	97
B60 Determine winch cable configurations	97
A9 Fire small arms for qualification	97
F271 Perform after-loading checklist procedures	97
C118 Inspect or inventory aircraft emergency equipment	97
F233 Brief loading crews concerning loading or unloading operations	97
A22 Open or close crew entrance or paratroop doors	97
C82 Inspect aircraft winches or snatch blocks	97
C80 Inspect aircraft forms	97
A47 Pick up or turn in weapons	97
A27 Order aircrew flight lunches	97
H328 Perform or review ditching procedures	97
B69 Perform weight and balance calculations for zero fuel	97
A48 Review flight crew information files (FCIFs)	97
F280 Review cargo documentation	97
F282 Tie down cargo, equipment, or baggage in aircraft	96
F268 Open or close aft cargo doors	96
F264 Load or unload passengers, other than engine running	96
F247 Inspect cargo prior to loading	96
F277 Perform stowaway checks	96
A6 Demonstrate use of life preservers, parachutes, exposure suits, personal protective equipment, or oxygen masks	96
F234 Compute entries on DD Forms 365-4 (Weight and Balance Clearance Form F - Transport)	96
F279 Raise or lower cargo ramps	96
C112 Inspect roller conveyors	96
C116 Inspect troop doors	96
F278 Perform winch cargo on- or offload procedures	96
F241 Compute roller-load limitations	96

TABLE 30

TASKS WHICH BEST DIFFERENTIATE BETWEEN AIR FORCE RESERVE COMMAND DAFSC 1A251 AND 1A271 MEMBERS
(PERCENT MEMBERS PERFORMING)

TASK	1A251 (N=280)	1A271 (N=317)	DIFFERENCE
I363 Conduct loadmaster or aircrew meetings	24	63	-40
I449 Supervise military personnel	16	50	-34
I371 Counsel subordinates concerning personal matters	5	37	-32
J464 Conduct OJT	13	44	-30
I430 Perform loadmaster scheduling activities, such as flights or currency requirements	7	35	-29
J470 Counsel trainees on training progress	7	36	-29
I409 Evaluate personnel for compliance with performance standards	2	30	-28
J467 Conduct qualification training	7	35	-28
I429 Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	10	37	-27
I357 Assign personnel to work areas or duty positions	23	50	-27

TABLE 31

REPRESENTATIVE TASKS PERFORMED BY
AIR FORCE RESERVE COMMAND DAFSC 1A291 MEMBERS
(PERCENT MEMBERS PERFORMING)

TASK	1A291 (N=37)
F280 Review cargo documentation	97
B50 Calculate allowable cabin loads (ACLs) for mission requirements	97
F268 Open or close aft cargo doors	97
A6 Demonstrate use of life preservers, parachutes, exposure suits, personal protective equipment, or oxygen masks	97
A26 Operate galley equipment, such as ovens, coffee makers, or microwave ovens	97
A1 Apply external power to aircraft	97
F277 Perform stowaway checks	97
C76 Inspect aft cargo doors or ramps	97
F270 Open or close troop doors	97
C112 Inspect roller conveyors	97
F278 Perform winch cargo on- or offload procedures	97
F262 Load or unload outsized or oversized cargo	97
C80 Inspect aircraft forms	97
C121 Inspect or inventory tie-down equipment	97
C118 Inspect or inventory aircraft emergency equipment	97
H317 Brief additional crew members or passengers on in-flight or ground emergency procedures	97
C81 Inspect aircraft lavatories	97
C116 Inspect troop doors	97
H328 Perform or review ditching procedures	97
B60 Determine winch cable configurations	97
A9 Fire small arms for qualification	97
A23 Operate emergency escape hatches	97
A7 Don or doff aircrew chemical warfare ensemble	97
A47 Pick up or turn in weapons	97
A8 Don or doff ground chemical warfare ensemble	97
F282 Tie down cargo, equipment, or baggage in aircraft	95
A19 Load crew gear or personal equipment on aircraft	95
F264 Load or unload passengers, other than engine running	95
B54 Coordinate aircraft loading or unloading with terminal or ramp personnel	95
F271 Perform after-loading checklist procedures	95
B69 Perform weight and balance calculations for zero fuel	95
F265 Load or unload rolling stock	95
B63 Identify safety measures required when loading or unloading aircraft	95
F247 Inspect cargo prior to loading	95
G292 Operate interphone systems	95

TABLE 32

TASKS WHICH BEST DIFFERENTIATE BETWEEN AIR FORCE RESERVE COMMAND DAFSC 1A271 AND 1A291 MEMBERS
(PERCENT MEMBERS PERFORMING)

TASK	1A271 (N=317)	1A291 (N=37)	DIFFERENCE
F269 Open or close forward cargo doors	54	30	24
I410 Evaluate personnel for instructor or flight examiner duties	25	68	-43
I362 Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	22	65	-43
I429 Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	37	78	-42
I425 Inspect personnel for compliance with military standards	33	76	-42
I409 Evaluate personnel for compliance with performance standards	3	70	-41
I468 Conduct upgrade training for instructors or flight examiners	27	68	-40
I420 Initiate actions required due to substandard performance of personnel	2	59	-39
I421 Initiate flight evaluation forms	19	57	-38
I417 Implement policies, directives, or procedures for loadmasters	22	59	-37
I411 Evaluate personnel for promotion, demotion, reclassification, or special awards	22	59	-37

DAFSC 1A200. These 12 AFRC CEMs account for just 1 percent of the survey sample. These members spend 70 percent of their time performing technical duties (e.g., loading and unloading aircraft, performing aircraft preflight activities, and performing common aircrew activities) and 30 percent of their time performing managerial, supervisory, and training activities (Table 25). Table 33 provides a list of primarily technical tasks performed by CEMs. However, Table 34 shows that a higher percentage of CEMs engage in managerial and supervisory tasks as compared to the more technically-oriented 9-skill level reservists.

Comparisons of Active Duty, ANG, and AFRC Members

Tables 35 through 39 display the average relative percent time spent on job duties for each skill level component group combination. The duties performed and time allocated to each duty by active duty, ANG, and AFRC personnel of each skill level are generally similar. Each group's members spend between 40 and 60 percent of their time engaged in three core duties: loading and unloading aircraft, performing aircraft preflight activities, and performing common aircrew activities. In addition to these core duty areas, members from the lower skill levels (i.e., 3- and 5-skill level personnel), regardless of component, tend to engage in several other duty areas such as performing or reviewing emergency procedures, preparing aircraft for airdrop operations, and performing preliminary load planning. Members from the upper skill levels (i.e., 7-, 9-, and CEM skill levels), regardless of component, tend to engage in managerial, supervisory, and training duties.

Summary

The Aircraft Loadmaster career ladder reflects an atypical pattern of career progression in that members perform primarily technical duties regardless of skill level. However, while members of the lower skill levels (i.e., 3- and 5-skill levels) tend to engage in technical duties alone, members of the upper skill levels (i.e., 7-, 9-, and CEM-skill levels) are characterized by their increasing involvement in supervisory, training, and managerial duties.

TRAINING ANALYSIS

Occupational survey data are one of many sources of information which can be used to develop and revise career ladder training programs. This training analysis consists of active duty first-enlistment personnel, TE and TD, STS, and Plan of Instruction (POI) segments. The first segment includes a discussion of the jobs and tasks performed by first-enlistment personnel within the career ladder and presents a table depicting the equipment and resources they typically use. The TE and TD segment summarizes senior NCOs' entry-level training priorities and what they

TABLE 33

REPRESENTATIVE TASKS PERFORMED BY
AIR FORCE RESERVE COMMAND DAFSC 1A200 MEMBERS
(PERCENT MEMBERS PERFORMING)

TASK	1A200 (N=12)
I449 Supervise military personnel	100
F234 Compute entries on DD Forms 365-4 (Weight and Balance Clearance Form F - Transport)	100
F268 Open or close aft cargo doors	100
F264 Load or unload passengers, other than engine running	100
B69 Perform weight and balance calculations for zero fuel	100
F270 Open or close troop doors	100
A22 Open or close crew entrance or paratroop doors	100
F282 Tie down cargo, equipment, or baggage in aircraft	100
F271 Perform after-loading checklist procedures	100
G292 Operate interphone systems	100
B58 Determine maximum passenger seat releases	100
F233 Brief loading crews concerning loading or unloading operations	100
A20 Maintain flight manuals, safety or operational supplements, or flight crew checklists	100
B63 Identify safety measures required when loading or unloading aircraft	100
F247 Inspect cargo prior to loading	100
A19 Load crew gear or personal equipment on aircraft	100
C80 Inspect aircraft forms	100
I363 Conduct loadmaster or aircrew meetings	100
I429 Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	100
A26 Operate galley equipment, such as ovens, coffee makers, or microwave ovens	100
F277 Perform stowaway checks	100
F248 Inspect vehicles prior to loading	100
C112 Inspect roller conveyors	100
C117 Inspect 463L rail systems	100
F265 Load or unload rolling stock	100
C102 Inspect oxygen systems	100
B50 Calculate allowable cabin loads (ACLs) for mission requirements	100
F240 Compute restraint criteria	100
C81 Inspect aircraft lavatories	100
C82 Inspect aircraft winches or snatch blocks	100
A11 Inspect aircraft locks or fasteners	100
C90 Inspect crew galleys	100
C116 Inspect troop doors	100
A14 Inspect or inventory personal equipment, other than personal protective equipment	100

TABLE 34

TASKS WHICH BEST DIFFERENTIATE BETWEEN AIR FORCE RESERVE COMMAND DAFSC 1A291 AND 1A200 MEMBERS
(PERCENT MEMBERS PERFORMING)

TASK	1A291 (N=37)	1A200 (N=12)	DIFFERENCE
A37 Perform engine start scanner duties	43	*	43
E224 Perform JAIs	41	*	41
B67 Load plan special weapons cargo	43	8	35
F250 Install or remove auxiliary truck loading ramps	59	25	34
D170 Perform airdrop malfunction noncommissioned officer (NCO) duties	32	*	32
F276 Perform combat load or unload procedures, other than NVD	41	8	32
D173 Perform pre-joint airdrop inspections (JAIs)	38	8	30
I373 Determine or establish publications requirements	38	8	30
B65 Load plan airdrop cargo	46	17	29
E214 Install or remove emergency restraint devices	46	17	29
I403 Evaluate job or position descriptions	35	92	-57
I448 Supervise civilian employees	30	83	-54
I405 Evaluate layouts of facilities	14	67	-53
I452 Write job or position descriptions	24	75	-51
I415 Evaluate workload requirements	32	83	-51
J458 Assign formal course instructors or on-the-job training (OJT) trainers or certifiers	16	67	-50
I358 Assign sponsors for newly assigned personnel	38	83	-46
I381 Develop or establish work schedules	46	92	-46
K519 Initiate or maintain standby rosters or workcenter pyramid recall rosters	14	58	-45
I402 Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) Program	22	67	-45

* Less than 1 percent

TABLE 35

TIME SPENT ON AFSC 1A2X1 JOB DUTIES ACROSS 3-SKILL LEVEL COMPONENT GROUPS
(AVERAGE RELATIVE PERCENT TIME SPENT)

DUTY	ACTIVE		AFRC	
	1A231	(N=148)	1A231	(N=5)
A PERFORMING COMMON AIRCREW ACTIVITIES	17	17	16	16
B PERFORMING PRELIMINARY LOAD PLANNING	8	8	10	10
C PERFORMING AIRCRAFT PREFLIGHT ACTIVITIES	20	20	19	19
D PERFORMING GROUND SUPPORT EQUIPMENT	5	5	7	7
E PREPARING AIRCRAFT FOR AIRDROP OPERATIONS	8	8	11	11
F LOADING OR UNLOADING AIRCRAFT	20	20	17	17
G PERFORMING IN-FLIGHT ACTIVITIES	8	8	7	7
H PERFORMING OR REVIEWING EMERGENCY PROCEDURES	10	10	11	11
I PERFORMING MANAGEMENT OR SUPERVISORY ACTIVITIES	1	1	*	*
J PERFORMING TRAINING ACTIVITIES	1	1	1	1
K PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER SYSTEM ACTIVITIES	1	1	1	1
L PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	1	1	1

* Less than 1 percent.

Note: Due to rounding, columns may not add to 100 percent

TABLE 36

TIME SPENT ON AFSC 1A2X1 JOB DUTIES ACROSS 5-SKILL LEVEL COMPONENT GROUPS
(AVERAGE RELATIVE PERCENT TIME SPENT)

DUTY	ACTIVE 1A251 (N=440)		AFRC 1A251 (N=280)		ANG 1A251 (N=118)	
A PERFORMING COMMON AIRCREW ACTIVITIES	15		18		18	
B PERFORMING PRELIMINARY LOAD PLANNING	7		9		8	
C PERFORMING AIRCRAFT PREFLIGHT ACTIVITIES	18		23		18	
D PERFORMING GROUND SUPPORT EQUIPMENT	5		5		6	
E PREPARING AIRCRAFT FOR AIRDROP OPERATIONS	10		3		11	
F LOADING OR UNLOADING AIRCRAFT	18		22		19	
G PERFORMING IN-FLIGHT ACTIVITIES	7		7		8	
H PERFORMING OR REVIEWING EMERGENCY PROCEDURES	10		9		9	
I PERFORMING MANAGEMENT OR SUPERVISORY ACTIVITIES	4		1		1	
J PERFORMING TRAINING ACTIVITIES	4		1		1	
K PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER SYSTEM ACTIVITIES	1		*		1	
L PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1		1		1	

* Less than 1 percent

NOTE: Due to rounding, columns may not add to 100 percent

TABLE 37

TIME SPENT ON AFSC 1A2X1 JOB DUTIES ACROSS 7-SKILL LEVEL COMPONENT GROUPS
(AVERAGE RELATIVE PERCENT TIME SPENT)

DUTY	ACTIVE 1A271 (N=373)		AFRC 1A271 (N=317)		ANG 1A271 (N=246)	
A PERFORMING COMMON AIRCREW ACTIVITIES	13		16		17	
B PERFORMING PRELIMINARY LOAD PLANNING	6		8		8	
C PERFORMING AIRCRAFT PREFLIGHT ACTIVITIES	15		19		17	
D PERFORMING GROUND SUPPORT EQUIPMENT	5		5		7	
E PREPARING AIRCRAFT FOR AIRDROP OPERATIONS	8		4		10	
F LOADING OR UNLOADING AIRCRAFT	16		19		18	
G PERFORMING IN-FLIGHT ACTIVITIES	6		7		7	
H PERFORMING OR REVIEWING EMERGENCY PROCEDURES	8		8		9	
I PERFORMING MANAGEMENT OR SUPERVISORY ACTIVITIES	12		6		3	
J PERFORMING TRAINING ACTIVITIES	6		4		3	
K PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER SYSTEM ACTIVITIES	2		1		1	
L PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1		1		1	

Note: Due to rounding, columns may not add to 100 percent

TABLE 38

TIME SPENT ON AFSC 1A2X1 JOB DUTIES ACROSS 9-SKILL LEVEL COMPONENT GROUPS
(AVERAGE RELATIVE PERCENT TIME SPENT)

DUTY	ACTIVE 1A291 (N=57)	AFRC 1A291 (N=37)	ANG 1A291 (N=56)
A PERFORMING COMMON AIRCREW ACTIVITIES	11	14	14
B PERFORMING PRELIMINARY LOAD PLANNING	5	7	6
C PERFORMING AIRCRAFT PREFLIGHT ACTIVITIES	13	14	13
D PERFORMING GROUND SUPPORT EQUIPMENT	4	5	6
E PREPARING AIRCRAFT FOR AIRDROP OPERATIONS	7	5	9
F LOADING OR UNLOADING AIRCRAFT	13	16	15
G PERFORMING IN-FLIGHT ACTIVITIES	5	6	6
H PERFORMING OR REVIEWING EMERGENCY PROCEDURES	7	7	8
I PERFORMING MANAGEMENT OR SUPERVISORY ACTIVITIES	24	15	13
J PERFORMING TRAINING ACTIVITIES	6	8	6
K PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER SYSTEM ACTIVITIES	4	2	3
L PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	1	1

TABLE 39

TIME SPENT ON AFSC 1A2X1 JOB DUTIES ACROSS CAREER ENLISTED MANAGER SKILL LEVEL COMPONENT GROUPS
(AVERAGE RELATIVE PERCENT TIME SPENT)

DUTY	ACTIVE 1A200 (N=32)		AFRC 1A200 (N=12)		ANG 1A200 (N=20)	
A PERFORMING COMMON AIRCREW ACTIVITIES	12		13		13	
B PERFORMING PRELIMINARY LOAD PLANNING	6		6		6	
C PERFORMING AIRCRAFT PREFLIGHT ACTIVITIES	13		15		12	
D PERFORMING GROUND SUPPORT EQUIPMENT	4		4		5	
E PREPARING AIRCRAFT FOR AIRDROP OPERATIONS	7		2		9	
F LOADING OR UNLOADING AIRCRAFT	14		15		13	
G PERFORMING IN-FLIGHT ACTIVITIES	5		5		6	
H PERFORMING OR REVIEWING EMERGENCY PROCEDURES	7		6		7	
I PERFORMING MANAGEMENT OR SUPERVISORY ACTIVITIES	20		21		18	
J PERFORMING TRAINING ACTIVITIES	6		9		7	
K PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER SYSTEM ACTIVITIES	4		3		2	
L PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1		1		1	

Note: Due to rounding, columns may not add to 100 percent

believe to be the most difficult tasks performed by loadmasters. Finally, the STS and POI segments evaluate the career ladder's current STS and POI and recommend revisions based on survey data.

First-Enlistment Personnel

Knowledge of a career ladder's first-enlistment personnel is a critical prerequisite for conducting an entry-level training curriculum revision. In this study, there are 158 active duty loadmasters in their first-enlistment (i.e., 1-48 months TAFMS), accounting for 7 percent of the survey sample. One-hundred percent of these members are identified with the Aircraft Loadmaster Cluster. As shown in Table 40, these members spend their time loading or unloading aircraft (20 percent), performing aircraft preflight activities (20 percent), performing common aircrew activities (17 percent), and performing or reviewing emergency procedures (10 percent). Table 41 provides a list of representative tasks performed by active duty first-enlistment personnel. Nearly all of these technical tasks are associated with these four duty areas. Active duty first-enlistment loadmasters use a variety of equipment and resources on the job. Table 42 lists those items used by more than 30 percent of active duty first-enlistment personnel.

Training Emphasis (TE) and Task Difficulty (TD) Data

TE and TD data can assist trainers in deciding which tasks to emphasize in entry-level training. As previously described in the **SURVEY METHODOLOGY** section, TE ratings rely on the judgments of senior career ladder NCOs (i.e., primarily E-6s and E-7s) from operational units to develop a rank ordering of those tasks considered important for entry-level training. Similarly, senior NCOs' TD ratings develop a rank ordering of those tasks considered to be difficult to learn to perform. When combined with data showing the percentages of first-enlistment personnel performing these tasks, training personnel can determine if adjustments to the curriculum are necessary. For example, tasks receiving both high TE and TD ratings and moderate to high percentages of members performing may warrant resident training. Those tasks receiving both high TE and TD ratings accompanied by low percentages may be more appropriate for OJT at gaining units. While tasks with low TE and TD ratings may be omitted from entry-level training, this decision must be weighed against the percentages of members performing those tasks and the career ladder functional manager's concerns for safety or impact to mission effectiveness.

Table 43 provides a list of those tasks with the highest TE ratings. The percentages of first-job and first-enlistment members performing and TD ratings are also included for each task. Over one-half of these tasks are technical tasks associated with the three core career ladder duty areas (i.e., loading or unloading aircraft, performing common aircrew activities, and performing aircraft preflight activities) and the remaining items are related to performing preliminary load planning and performing or reviewing emergency procedures. Many of these tasks are performed by high percentages of first-enlistment personnel. Table 44 lists those tasks with the highest TD ratings. The percentages of members performing these tasks for various TAFMS and DAFSC groups and

TABLE 40

TIME SPENT ON AFSC 1A2X1 JOB DUTIES BY ACTIVE DUTY FIRST-ENLISTMENT AIRMEN
(AVERAGE RELATIVE PERCENT TIME SPENT)

DUTY	FIRST- ENLISTMENT AIRMEN (N=158)
A PERFORMING COMMON AIRCREW ACTIVITIES	17
B PERFORMING PRELIMINARY LOAD PLANNING	8
C PERFORMING AIRCRAFT PREFLIGHT ACTIVITIES	20
D PERFORMING GROUND SUPPORT EQUIPMENT	5
E PREPARING AIRCRAFT FOR AIRDROP OPERATIONS	9
F LOADING OR UNLOADING AIRCRAFT	20
G PERFORMING IN-FLIGHT ACTIVITIES	8
H PERFORMING OR REVIEWING EMERGENCY PROCEDURES	10
I PERFORMING MANAGEMENT OR SUPERVISORY ACTIVITIES	1
J PERFORMING TRAINING ACTIVITIES	1
K PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER SYSTEM ACTIVITIES	1
L PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1

Note: Due to rounding, the column may not add to 100 percent

TABLE 41

REPRESENTATIVE TASKS PERFORMED BY
ACTIVE DUTY AFSC 1A2X1 FIRST-ENLISTMENT MEMBERS
(PERCENT MEMBERS PERFORMING)

TASK	FIRST- ENLISTMENT (N=158)
F268 Open or close aft cargo doors	97
A22 Open or close crew entrance or paratroop doors	97
F270 Open or close troop doors	97
C80 Inspect aircraft forms	97
C90 Inspect crew galleys	97
A26 Operate galley equipment, such as ovens, coffee makers, or microwave ovens	97
F282 Tie down cargo, equipment, or baggage in aircraft	96
H317 Brief additional crew members or passengers on in-flight or ground emergency procedures	96
A9 Fire small arms for qualification	96
A48 Review flight crew information files (FCIFs)	96
C126 Inspect or set lighting in troop or cargo compartments	96
F277 Perform stowaway checks	96
C116 Inspect troop doors	96
A6 Demonstrate use of life preservers, parachutes, exposure suits, personal protective equipment, or oxygen masks	96
C82 Inspect aircraft winches or snatch blocks	96
C138 Test interphone stations	95
H330 Perform or review emergency aircraft ground egress procedures	95
F261 Load or unload nonpalletized cargo	95
A20 Maintain flight manuals, safety or operational supplements, or flight crew checklists	94
F271 Perform after-loading checklist procedures	94
F279 Raise or lower cargo ramps	94
C139 Test public address systems	94
F234 Compute entries on DD Forms 365-4 (Weight and Balance Clearance Form F - Transport)	94
A19 Load crew gear or personal equipment on aircraft	94
F263 Load or unload palletized cargo, other than engine running	94
F247 Inspect cargo prior to loading	94
H328 Perform or review ditching procedures	94
F240 Compute restraint criteria	93
C117 Inspect 463L rail systems	92
C112 Inspect roller conveyors	92
F233 Brief loading crews concerning loading or unloading operations	92
F278 Perform winch cargo on- or offload procedures	92
B69 Perform weight and balance calculations for zero fuel	91

TABLE 42

EQUIPMENT USED BY MORE THAN 30 PERCENT OF ACTIVE DUTY AFSC 1A2X1
FIRST-ENLISTMENT MEMBERS
(PERCENT MEMBERS USING)

EQUIPMENT	FIRST- ENLISTMENT (N=158)
Chains and Devices, 10,000-lb capacity	97
Straps, 5,000-lb capacity	97
Chains and Devices, 25,000-lb capacity	96
Cargo Winches, Internal	94
Oxygen Equipment	93
Bridge Plates	92
Emergency Equipment	92
Passenger Comfort Items (blankets, pillows, earplugs)	92
Tie-Down Fittings	89
Handheld Calculators	85
Snatch Blocks or Pulleys, other than for Missiles	85
Roller Conveyors, other than Missile	84
Rails, 463L	83
Ground Loading Ramps	78
Protective Clothing or Survival Equipment	78
Job Guides or Checklists	75
Cargo Loading Ramps or Struts	74
Seat and Litter Stanchions	73
Prybars	66
Auxiliary Truck Loading Ramps	63
Comfort Pallets	58
Airdrop Equipment, Heavy	52
Airdrop Equipment, Container Delivery System (CDS)	51
Airdrop Equipment, Personnel/High-Altitude Low-Opening	47
Cargo Winches, External	47
Centerline Vertical Restraint (CVR) Equipment	44
Auxiliary Power Units (APUs)	42
Remote Winch Controllers	41
Combat Rubber Raiding Crafts (CRRCs)	35
Material Handling Equipment (MHE)	35
Passenger Loading Ramps	33

TABLE 43

AFSC 1A2X1 TASKS WITH THE HIGHEST TRAINING EMPHASIS RATINGS

TASK		TE*	1ST-JOB (N=70)	1ST-ENL (N=158)	TD**
F234	Compute entries on DD Forms 365-4 (Weight and Balance Clearance Form F - Transport)	7.49	97	94	5.41
F240	Compute restraint criteria	7.07	97	93	5.13
H330	Perform or review emergency aircraft ground egress procedures	7.05	100	95	4.79
B63	Identify safety measures required when loading or unloading aircraft	7.00	90	91	4.90
A20	Maintain flight manuals, safety or operational supplements, or flight crew checklists	6.84	94	94	5.10
B72	Verify suitability or compatibility of hazardous cargo being loaded	6.81	87	87	6.12
B52	Calculate vehicle clearances	6.77	83	87	5.70
B51	Calculate outsized or oversized cargo clearances	6.73	80	86	5.79
F247	Inspect cargo prior to loading	6.72	99	94	4.65
B50	allowable cabin loads (ACLs) for mission requirements	6.70	60	71	5.28
F248	Perform winch cargo on- or offload procedures	6.67	96	92	5.51
F241	Compute roller-load limitations	6.66	91	89	5.63
H324	Perform or review cargo fire procedures	6.63	93	89	4.78
F248	Inspect vehicles prior to loading	6.63	94	89	4.74
A6	Demonstrate use of life preservers, parachutes, exposure suits, personal protective equipment, or oxygen masks	6.59	94	96	3.49
H328	Perform or review ditching procedures	6.57	97	94	5.09
H329	Perform or review electrical fire procedures	6.57	80	83	5.01
F242	Compute shoring requirements	6.56	87	85	5.64
H352	Perform or review smoke or fumes elimination procedures	6.54	91	90	4.94
F233	Brief loading crews concerning loading or unloading operations	6.52	97	92	4.34
F271	Perform after-loading checklist procedures	6.52	97	94	4.11
A23	Operate emergency escape hatches	6.50	84	87	3.14
C118	Inspect or inventory aircraft emergency equipment	6.48	91	91	4.09

* The mean Training Emphasis (TE) rating is 2.20 with a standard deviation of 2.06; tasks with TE ratings in excess of 4.26 are considered to be "high" in task emphasis

** The mean Task Difficulty (TD) rating is 5.00 with a standard deviation of 1.00; tasks with TD ratings in excess of 6.00 are considered to be "high" in task difficulty

TABLE 44

AFSC 1A2X1 TASKS WITH THE HIGHEST TASK DIFFICULTY RATINGS

TASK	TD*	1ST-JOB (N=70)	1ST-ENL (N=158)	ACTIVE 1A231 (N=148)	ACTIVE 1A251 (N=440)	ACTIVE 1A271 (N=373)	TE**
D166 Install ATO bottles	7.29	0	3	3	3	1	0.11
D167 Install ATO igniters	7.11	0	1	1	2	1	0.10
F275 Perform NVD combat load or unload procedures	6.90	0	5	6	14	20	0.67
G298 Perform helicopter aerial refueling procedures	6.90	1	3	2	6	9	0.45
A41 Perform new flight procedures flight tests	6.78	9	11	9	10	12	0.66
B68 Perform validations on new cargo	6.75	16	22	22	20	32	2.01
G309 Recover equipment or personnel using STAR subsystems	6.68	1	1	1	2	0	0.00
D182 Rig weapons for airdrops	6.64	7	9	9	13	9	1.92
G310 Repair MASS malfunctions	6.60	0	1	1	2	1	0.00
D144 Configure aircraft for MAFFS missions	6.58	1	2	3	2	1	0.34
D181 Rig vehicles for airdrops	6.57	16	17	16	18	13	2.34
D169 Pack parachutes	6.54	0	1	1	9	5	0.61
F266 Load or unload simulated nuclear weapons	6.47	20	25	24	21	19	1.20
A3 Assist maintenance personnel in identifying MASS malfunctions	6.42	9	10	10	9	8	0.21
D145 Configure aircraft for MASS missions	6.41	1	2	3	2	1	0.17
F262 Load or unload outsized or oversized cargo	6.41	87	85	84	75	82	6.26
D174 Perform remote air-to-air refueling procedures	6.36	1	2	1	5	6	0.45
F267 Load or unload tracked vehicles	6.33	47	52	57	53	66	5.63
E203 Install or remove A/A37A-11 towplates for heavy equipment drops	6.31	1	4	3	9	11	0.70
H354 Perform or review STAR malfunction procedures	6.31	1	1	1	2	1	0.04

* The mean Task Difficulty (TD) rating is 5.00 with a standard deviation of 1.00; tasks with TD ratings in excess of 6.00 are considered to be "high" in task difficulty

** The mean Training Emphasis (TE) rating is 2.20 with a standard deviation of 2.06; tasks with TE ratings in excess of 4.26 are considered to be "high" in task emphasis

TE ratings are also provided. The list reveals the tasks rated as most difficult are those relating to the performance of unique missions (e.g., Modular Aerial Spray System, Surface To Air Recovery, nuclear weapon transport, helicopter aerial refueling, and Modular Aerial Fire Fighting System). Generally, these tasks are performed by a small percentage of loadmasters.

Specialty Training Standard (STS)

To assist in an evaluation of the (draft) AFSC 1A2X1 STS (dated December 1997), operational training personnel from the 362nd Training Squadron, Sheppard AFB TX, matched (i.e., linked) tasks from the JI to the appropriate STS item(s). A "matched task" version of the STS was then printed with the percentages of members performing these tasks displayed for various TAFMS and DAFSC groups. Criteria contained within AETC Instruction (AETCI) 36-2601, paragraph 2.2, and Attachment 2, were used to review the relevance of each STS item with respect to occupational data. All STS items with matched tasks were reviewed; a complete review of the STS was not possible due to the presence of items without matched tasks. Overall, the STS was found to be entirely supported by occupational data.

AETCI 36-2601 states that any STS item with matched tasks performed by 20 percent or more of first-job (i.e., 1-24 months TAFMS), first-enlistment (i.e., 1-48 months TAFMS), or 3-, 5-, or 7-skill level members is considered to be supported by occupational data and should be retained in the STS. An analysis of the AFSC 1A2X1 STS found all matched items were supported and did not identify any items as candidates for proficiency code revision. However, one unmatched technical task, "perform periodic cargo inspections," performed by greater than 20 percent of various TAFMS and DAFSC group members was identified as a potential STS item. Due to a high TE rating coupled with high percentages of members performing this task, training personnel should review this subject area for possible inclusion in the STS. This task may either fit an existing item, but was simply not referenced during the match, or it may require the introduction of a new STS item.

Plan of Instruction (POI)

In preparation for the POI analysis, operational training personnel matched JI tasks to the Apprentice Aircraft Loadmaster Course (J3ABR1A231-004) POI (dated 3 October 1996). POI items with matched tasks performed by 30 percent or more of first-job (i.e., 1-24 months TAFMS) or first-enlistment (i.e., 1-48 months TAFMS) personnel are considered to be supported by occupational data and should be retained in the POI. Of all matched POI items, three items relating to weight and balance and one item relating to safety procedures were found to be unsupported (see Table 45). These POI items are matched to tasks performed by low percentages of loadmasters and generally possess average TE and TD ratings. As a result, they have been identified as candidates for deletion from the POI. Training personnel should carefully review these areas of the POI to determine which are suitable for deletion.

TABLE 45

AFSC 1A2X1 PLAN OF INSTRUCTION ITEMS
NOT SUPPORTED BY OCCUPATIONAL SURVEY REPORT DATA

POI ITEM WITH ASSOCIATED MATCHED TASK	TE*	1ST- JOB (N=70)	1ST- ENL (N=158)	TD**
II.1.a. Given the weight, arm, and moment (WAM) formula, compute the weight, arm, and moment with at least 80 percent accuracy				
F238 Compute load distributions for other than MASS missions using Chart E, aircraft configuration manual, and mathematics	2.49	27	29	5.92
II.2.a. Given the weight, arm, and moment for aircraft weight and balance, compute weight, center of gravity arm, and aircraft moments with at least 80 percent accuracy.				
F238 Compute load distributions for other than MASS missions using Chart E, aircraft configuration manual, and mathematics	2.49	27	29	5.92
II.3.a. Using the Percent of MAC and/or the center of gravity arm formula(s), compute the aircraft center of balance with at least 80 percent accuracy.				
F238 Compute load distributions for other than MASS missions using Chart E, aircraft configuration manual, and mathematics	2.49	27	29	5.92
III.1.a. Given situations typical of aircraft loadmaster activities, state the correct safety precautions to be followed with at least 80 percent accuracy.				
D172 Perform ground safety observer duties	1.57	9	13	4.85

* The mean Training Emphasis (TE) rating is 2.20 with a standard deviation of 2.06; tasks with TE ratings in excess of 4.26 are considered to be "high" in task emphasis

** The mean Task Difficulty (TD) rating is 5.00 with a standard deviation of 1.00; tasks with TD ratings in excess of 6.00 are considered to be "high" in task difficulty

Table 46 displays unmatched tasks performed by greater than 30 percent of first-job and first-enlistment personnel. In general, these tasks are technical in nature and are associated with a number of technical duties such as performing or reviewing emergency procedures, loading or unloading aircraft, performing aircraft preflight activities, and performing common aircrew activities. Due to the moderate to high percentage of members performing these tasks and their high TE ratings, training personnel should review these tasks for possible inclusion in the POI. As noted in the STS analysis, these tasks may either fit existing items, but were simply not referenced during the match, or they may require the introduction of a new POI item.

Due to the generic (i.e., nonaircraft specific) nature of the Apprentice Aircraft Loadmaster Course, several aircraft specific loadmaster qualification course POIs (or equivalents) were also evaluated. These courses include the C-5 Loadmaster Initial Qualification Course, C-17 Loadmaster Airland Qualification Course, C-17 Loadmaster Airdrop Qualification Course, C-130 Loadmaster Initial Qualification Course, C-130 Loadmaster Mission Qualification Course, C-141 Loadmaster Initial Qualification Course, and C-141 Loadmaster Airdrop Qualification Course. The results of these evaluations were provided to courseware managers at each course's respective training locations.

JOB SATISFACTION ANALYSIS

An analysis of job satisfaction indicators can provide career ladder functional managers with a better understanding of the factors affecting the overall performance of Aircraft Loadmasters. The survey included items dealing with job interest, perceived use of talents, perceived use of training, sense of accomplishment, and reenlistment intentions. Job satisfaction was then examined from two perspectives. Table 47 depicts the responses of the total sample (i.e., active duty, ANG, and AFRC loadmasters) to the five job satisfaction indicators. Overall, these responses show that loadmasters are very content with their jobs. Table 48 compares the responses of only active duty loadmasters in this study to those surveyed in the 1991 study. Overall, job satisfaction is only slightly lower in 1997 than in 1991. However, intentions to reenlist are notably lower among first- and second-enlistment loadmasters. While intentions to reenlist are also notably lower among career active duty loadmasters, this decrease is largely the result of an increase in planned retirements.

IMPLICATIONS

This survey was conducted primarily to provide training personnel with current information on the Aircraft Loadmaster career ladder for use in revising current career ladder documents and training programs. The career ladder structure was found to be generally stable when compared to the previous study. The Aircraft Loadmaster career ladder reflects an atypical pattern of career

TABLE 46

EXAMPLES OF TECHNICAL TASKS NOT REFERENCED
IN THE AFSC 1A2X1 PLAN OF INSTRUCTION

TASK	TE*	1ST-JOB (N=70)	1ST-ENL (N=158)	TD**
H330 Perform or review emergency aircraft ground egress procedures	7.05	100	95	4.79
B51 Calculate outsized or oversized cargo clearances	6.73	80	86	5.79
F241 Compute roller-load limitations	6.66	91	89	5.63
H324 Perform or review cargo fire procedures	6.63	93	89	4.78
H328 Perform or review ditching procedures	6.57	97	94	5.09
H329 Perform or review electrical fire procedures	6.57	80	83	5.01
H352 Perform or review smoke or fumes elimination procedures	6.54	91	90	4.94
A23 Operate emergency escape hatches	6.50	84	87	3.14
C118 Inspect or inventory aircraft emergency equipment	6.48	91	91	4.09
H325 Perform or review cargo jettison procedures	6.39	93	89	5.22
F268 Open or close aft cargo doors	6.38	99	97	4.28
H331 Perform or review emergency ramp or door procedures	6.34	89	86	5.08
F262 Load or unload outsized or oversized cargo	6.26	87	85	6.41
H334 Perform or review fuselage fire procedures	6.24	77	80	4.98
A24 Operate fire extinguishers	6.15	59	63	2.94
C102 Inspect oxygen systems	6.06	86	91	4.24
A22 Open or close crew entrance or paratroop doors	6.01	99	97	3.00
F264 Load or unload passengers, other than engine running	5.95	93	91	4.28
H350 Perform or review rapid decompression procedures	5.80	87	85	4.87
F273 Perform engine-running loading or unloading or cargo using other than MHE	5.72	66	68	5.85
F272 Perform engine-running loading or unloading of cargo using MHE	5.71	60	63	5.82
F270 Open or close troop doors	5.66	100	97	3.51
C116 Inspect troop doors	5.64	94	96	3.37
H323 Perform or review bailout procedures	5.61	91	91	4.52
F274 Perform engine-running loading or unloading of passengers	5.61	81	81	5.08
C91 Inspect emergency escape hatches	5.57	59	73	3.36
C80 Inspect aircraft forms	5.56	97	97	3.81
A9 Fire small arms for qualification	5.32	96	96	3.86

* The mean Training Emphasis (TE) rating is 2.20 with a standard deviation of 2.06; tasks with TE ratings in excess of 4.26 are considered to be "high" in task emphasis

** The mean Task Difficulty (TD) rating is 5.00 with a standard deviation of 1.00; tasks with TD ratings in excess of 6.00 are considered to be "high" in task difficulty

TABLE 47

**JOB SATISFACTION INDICATORS FOR AFSC 1A2X1 MEMBERS
(PERCENT MEMBERS RESPONDING)**

JOB SATISFACTION INDICATOR	ALL AIRCRAFT LOADMASTERS* (N=2,142)
EXPRESSED JOB INTEREST:	
INTERESTING	93
SO-SO	5
DULL	2
PERCEIVED USE OF TALENTS:	
FAIRLY WELL TO PERFECT	92
NONE TO VERY LITTLE	8
PERCEIVED USE OF TRAINING:	
FAIRLY WELL TO PERFECT	95
NONE TO VERY LITTLE	5
SENSE OF ACCOMPLISHMENT:	
SATISFIED	87
NEUTRAL	6
DISSATISFIED	7

*Includes active duty, Air Force Reserve Command, and Air National Guard personnel

TABLE 48

COMPARISON OF CURRENT AND PREVIOUS STUDY JOB SATISFACTION INDICATORS ACROSS TAFMS GROUPS*
(PERCENT MEMBERS RESPONDING)

JOB SATISFACTION INDICATOR	1-48 MONTHS TAFMS		49-96 MONTHS TAFMS		97+ MONTHS TAFMS	
	1997 1A2X1 (N=158)	1991 114X0 (N=164)	1997 1A2X1 (N=203)	1991 114X0 (N=113)	1997 1A2X1 (N=689)	1991 114X0 (N=1,028)
EXPRESSED JOB INTEREST:						
INTERESTING	90	93	88	93	88	91
SO-SO	6	5	11	4	8	6
DULL	4	2	1	3	4	3
PERCEIVED USE OF TALENTS:						
FAIRLY WELL TO PERFECT	87	92	89	94	89	91
NONE TO VERY LITTLE	13	8	11	6	11	9
PERCEIVED USE OF TRAINING:						
FAIRLY WELL TO PERFECT	97	94	95	97	89	93
NONE TO VERY LITTLE	3	6	5	3	11	7
SENSE OF ACCOMPLISHMENT:						
SATISFIED	86	**	84	**	82	**
NEUTRAL	6	**	8	**	8	**
DISSATISFIED	8	**	8	**	10	**
REENLISTMENT INTENTIONS:						
YES OR PROBABLY YES	56	67	69	81	61	80
NO OR PROBABLY NO	44	33	31	18	10	6
WILL RETIRE	0	0	0	1	29	14

* Active duty personnel only

** These data are not available

Note: AFSC 114X0 Aircraft Loadmaster was redesignated AFSC 1A2X0 in 1993

progression in that, regardless of skill level, all loadmasters engage in three core duties. However, while members of the lower skill levels tend to engage in technical duties alone, members of the upper skill levels are characterized by their increasing involvement in supervisory, training, and managerial duties. The training analysis concluded the STS was entirely supported and the POI was generally supported. However, several items were identified for review by training personnel as candidates for revision. Finally, loadmaster job satisfaction was found to be good overall.

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